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, 2020

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:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
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	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards 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. ☐

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, 2020, was approximately $56 million based on the closing price of the Company's common stock as reported that date on the New York Stock Exchange of $3.04 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 28, 2021: 18,389,139

DOCUMENTS INCORPORATED BY REFERENCE

Part III incorporates certain information by reference from the registrant's definitive proxy statement for the 2021 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, 2020.

TABLE OF CONTENTS

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. 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 matters 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 effects of the COVID-19 pandemic on our operations and the world economy;
- 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;
- worldwide market demand for coal, steel, and electricity, including demand for U.S. coal exports, and competition in coal markets;
- our ability to obtain financing 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;
- our ability to meet collateral requirements;
- the imposition or continuation of barriers to trade, such as tariffs;
- reductions or increases in customer coal inventories and the timing of those changes;
- our production capabilities and costs;
- inherent risks of coal mining beyond our control;
- changes in, interpretations of, or implementations of domestic or international tax or other laws and regulations, including the Tax Cuts and Jobs Act and its related regulations;
- 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;
- our relationships with, and other conditions affecting, our customers, including the inability to collect payments from our customers if their creditworthiness declines;
- 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;
- our ability to obtain, maintain or renew any necessary permits or rights, and our ability to mine properties due to defects in title on leasehold interests;
- attracting and retaining key personnel and other employee workforce factors, such as labor relations;
- funding for and changes in employee benefit obligations;
- cybersecurity attacks or failures, threats to physical security, extreme weather conditions or other natural disasters;
- reclamation and mine closure obligations;
- utilities switching to alternative energy sources such as natural gas, renewables and coal from basins where we do not operate;
- our assumptions concerning economically recoverable coal reserve estimates;
- 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;
- failures in performance, or non-performance, of services by third-party contractors, including contract mining and reclamation contractors;
- inflationary pressures on supplies and labor and significant or rapid increases in commodity prices;
- railroad, barge, truck and other transportation availability, performance and costs;
- disruption in third-party coal supplies;
- the consummation of financing or refinancing transactions, acquisitions or dispositions and the related effects on our business and financial position;
- our indebtedness and potential future indebtedness; and
- our ability to obtain or renew surety bonds on acceptable terms or maintain our current bonding status.

The factors identified above are not exhaustive. We caution readers not to place undue reliance on any forward-looking statements, which are based only 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, 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 "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). 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 across Virginia and West Virginia. With customers across the globe, high-quality reserves and significant port capacity, we are a leading U.S. supplier of metallurgical products for the steel industry. We operate high-quality, cost-competitive coal mines across the Central Appalachia ("CAPP") coal basin. Our portfolio of mining operations consists of 16 underground mines, seven surface mines and eight coal preparation plants. We own a 65.0% interest in Dominion Terminal Associates ("DTA"), a coal export terminal in eastern 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 low-ash metallurgical ("met") coal, including High-Vol. A, Mid-Vol., High-Vol. B, and Low-Vol. coal, which is shipped to domestic and international coke and steel producers. Although our strategic focus is on the production of met coal, we also produce low sulfur, high British thermal unit ("BTU") thermal coal for electricity generation, as well as specialty coal for industrial customers. Our thermal coal is primarily sold to the domestic power generation industry.

We have two reportable segments: Met, and CAPP - Thermal. Refer to Note 25 to the Consolidated financial statements for more information about our reportable segments.

We have a substantial reserve base of 445.0 million tons of proven reserves and approximately 178.5 million tons of probable reserves, which we believe could support current production levels for more than 25 years based on our 2020 production levels. Our reserve base in Met consists of 441.1 million tons of proven and 178.0 million tons of probable reserves, of which 91% is met coal. Our reserve base in CAPP - Thermal consists of 3.9 million tons of proven and 0.5 million tons of probable reserves, of which 100% is thermal coal.

Through our operations and reserves across coal producing basins 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 over a decade. We are continuously evaluating opportunities to strategically cultivate current relationships to drive new business in our target growth markets that include India and Southeast Asia, among others. In addition, our experienced management team regularly analyzes acquisitions, joint ventures and other opportunities that would be accretive and synergistic to our existing asset portfolio.

During 2020, we began production at Road Fork 52, Black Eagle and Lynn Branch which were previously identified organic met coal opportunities within Met. Road Fork 52 and Lynn Branch are primarily reserve replacement mines, but they are expected to provide some incremental production of Low-Vol. and High-Vol. B+ met coal, respectively. The Black Eagle mine is expected to increase production of Marfork High-Vol met coal. Production at these adjacent mines provides embedded growth potential while utilizing existing infrastructure.

Our History

We were formed 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 in 2016. 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. Refer to Note 16 for further information on our acquisition-related obligations.

We began operations on July 26, 2016 and currently operate mines in the Central Appalachia region.

On December 8, 2017, we closed a transaction with Blackjewel L.L.C. ("Buyer" or "Blackjewel") to sell our Eagle Butte and Belle Ayr mines located in the Powder River Basin ("PRB"), Wyoming, along with related coal reserves, equipment, infrastructure and other real properties. Refer to Note 3 for information related to Blackjewel's subsequent bankruptcy filing and the related ESM Transaction.

We merged with Alpha Natural Resources Holdings, Inc. and ANR, Inc. on November 9, 2018. 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 Northern Appalachia ("NAPP") operations). This transaction accelerated our strategic exit from thermal coal production to shift our focus to met coal production.

The former PRB and NAPP operations results of operations and financial position are reported as discontinued operations in the Consolidated Financial Statements. The historical information in the accompanying Notes to the Consolidated Financial Statements has been restated to reflect the effects of these former operations being reported as discontinued operations in the Consolidated Financial Statements. Refer to Note 3 for further information on discontinued operations.

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.

Operations and Properties

The following tables present a summary of our mining operations by reportable segment:

			Number & Type of Mines as of December 31, 2020		
Reportable Segment	**Location**	**Preparation Plants / Shipping Points as of December 31, 2020**	**Underground**	**Surface**	**Total**
Met	VA, WV	McClure, Toms Creek, Bandmill, Kepler, Kingston, Marfork, Power Mountain, Pax Loadout, Mammoth, Marmet, Feats Loadout	15	7	22
CAPP - Thermal	WV	Bandmill, Mammoth	1	—	1

Reportable Segment	**Primary Coal Qualities**	**Transportation**	**2020 Production of Saleable Tons (in thousands) [(1)]**
Met	High-Vol. Met, Mid-Vol. Met, Low-Vol. Met	Truck, CSX Transportation, Norfolk Southern Railway Company, Barge	12,157
CAPP - Thermal	Thermal	Truck, CSX Transportation, Norfolk Southern Railway Company, Barge	1,978
			14,135

(1) Includes coal purchased from third-party producers that was processed at our preparation plants in 2020.

We consider Deep Mine 41, Road Fork 52, Black Eagle, and Lynn Branch in Met to be individually material mines.

Met

Our Met operations consist of high-quality met coal mines, including Deep Mine 41, Road Fork 52, Black Eagle, and Lynn Branch. The coal produced by Met operations is predominantly met coal with some amounts of thermal coal being produced as a byproduct of mining. The following table provides a summary of our Met operations' coal qualities during the years ended December 31, 2020 and 2019:

Coal Qualities	Year Ended December 31, 2020	2019
High-Vol. A	36.3%	38.2%
High-Vol. B	19.4%	19.5%
High-Vol. C	2.3%	2.5%
Mid-Vol.	21.7%	20.0%
Low-Vol.	12.3%	13.3%
Thermal	8.0%	6.5%

During the years ended December 31, 2020 and 2019, we shipped 9.1 million tons and 8.4 million tons, respectively, of our coal production from our Met operations internationally to customers in Europe, Asia and the Americas, with the remaining met coal production sold into the domestic market. See Item 2. Properties, Costs & Calculations, for the two-year historical average sales prices.

Deep Mine 41, associated with the McClure Prep Plant, is located in Dickenson County, Virginia on property subject to a lease dated April 1, 2003. We can automatically extend the lease until March 31, 2063. The McClure Plant is a 1,000 ton per hour plant that is located on owned property in Dickenson County, Virginia. It was built in 1979 and upgraded in 1998.

Road Fork 52 is located in Wyoming County, West Virginia on three individual lease tracts. These leases were signed between 1960 and 2020. Current production is on a lease dated August 25, 1997. After expiration of the initial 10-year term of this lease, the lease automatically extended for successive five-year periods. The current five-year period expires August 24, 2022 and shall be renewed for another five-year period unless a 90-day termination notice is provided by the lessee. There will be future production on a lease dated January 28, 2020 which has a term of 20 years, and a lease dated August 1, 1960 which extends for successive 30 year terms until the mineable and merchantable coal is exhausted.

Black Eagle is located in Boone and Raleigh County, West Virginia near the community of Pettus. The reserve area is composed of five individual leases signed between 1929 and 2018 with various extension terms and periods. The majority of the reserve is located on a lease dated January 1, 1956 that expires on December 31, 2024. The earliest lease expiration date without renewal rights is December 21, 2022. It is customary to enter into new leases once the final extension period has expired.

Lynn Branch deep mine in the 2 Gas seam is located in Logan County, West Virginia near the community of Rita. There are several leases dedicated to the mine with the primary reserves controlled by a lease dated January 1, 1969, which currently expires on December 31, 2026. We can automatically extend the lease for three successive five-year terms until December 31, 2041. All other leases are in good standing with similar lease terms.

CAPP - Thermal

As of December 31, 2020, our CAPP - Thermal operations consist one underground thermal coal mine. The coal produced by CAPP - Thermal operations is predominantly thermal coal with some met coal byproduct. For the years ended December 31, 2020 and 2019, our CAPP - Thermal coal quality was composed of low sulfur, high BTU coal. During the years ended December 31, 2020 and 2019, we shipped 1.8 million tons and 3.5 million tons of our thermal coal production from our CAPP - Thermal operations domestically to utility and industrial customers.

Former NAPP and PRB Operations

Our former NAPP operations consisted of our thermal coal mining operations located in Pennsylvania consisting primarily of our Cumberland mining complex and related property. On December 10, 2020, we closed on a transaction with Iron Senergy Holdings, LLC, to sell the former NAPP operations. Our former PRB operations consisted of the Belle Ayr and Eagle Butte mines, located in Wyoming. On December 8, 2017, we sold these to Blackjewel, along with related coal reserves, equipment, infrastructure and other real properties. Refer to Note 3 for information related to Blackjewel’s subsequent bankruptcy filing, the related ESM Transaction, and further information on discontinued operations.

Financial Information About Reportable Segments and Geographic Areas

Refer to Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, and Notes 24 and 25 for financial information about reportable segments and geographic areas.

Mine Life

The following table provides a summary of mine life for our active mines by segment, as of December 31, 2020:

Reportable Segment	Location	Estimated Years
Met [1]	Virginia, West Virginia	1 to 26
CAPP - Thermal	West Virginia	3

[1] Includes Deep Mine 41, Road Fork 52, Black Eagle, and Lynn Branch with estimated mine life of 15 years, 25 years, 18 years, and 26 years, respectively.

Coal Mining Techniques

We use four different mining techniques to extract coal from the ground: room-and-pillar mining, truck-and-shovel mining, 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 in our CAPP 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 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-feet or 11-feet 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.

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 customer needs and requirements. By offering coal of various types and grades to provide specific qualities of heat content, sulfur and ash and other characteristics relevant to our customers, we are able to serve a global customer base. Through this global platform, our coals are shipped to customers on five continents. This diversity 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 small volumes 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 operations also include met coal volumes purchased from domestic third-party producers and sold into international markets.

Our export shipments serviced customers through shipping ports in 23 and 22 countries during the years ended December 31, 2020 and 2019, respectively. Europe was our largest export market during these periods, with coal sales to Europe accounting for approximately 34% and 37%, respectively, of export coal revenues and 22% and 22%, respectively, of coal revenues for the years ended December 31, 2020 and 2019. All of our sales are made in U.S. dollars. Refer to Note 24 for additional export coal revenue information.

Our metallurgical coal sales are typically made with customers with whom we have a long-term relationship. However, defined pricing and volume in our sales agreements tend to be short-term in nature. Domestic metallurgical 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. Future volume for future years is generally contingent on both parties agreeing to a pricing mechanism to cover the contract year.

We enter into long-term contracts (typically ranging from one to five years) 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, 2020 and 2019, approximately 71% and 45%, 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 2020 and 2019, 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 80% and 79% of total shipments of coal volume from our mines during the years ended 2020 and 2019, 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 US ports when warranted by logistics and economics. In March 2017, we increased our stake in the DTA coal export terminal from 40.6% to 65.0%, which provides us with 14 million tons of export capacity.

Equipment

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

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 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. For further discussion of our sources and availability of materials, see Item 1A "Risk Factors–Risks Related to Our Operations–*Decreased availability or increased costs of key equipment and materials, including certain items mandated by regulations, or of coal that we purchase from third parties, could impact our cost of production and decrease our profitability.*"

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 metallurgical coal market, of the approximately 59 million tons produced in the U.S. in 2020, we sold approximately 12.4 million tons, or 21%. A significant portion of U.S. metallurgical coal production is shipped internationally, where it competes directly with international sources of production. Approximately 73% of our metallurgical coal sold was shipped internationally in 2020.

In the thermal market, of the approximately 475 million tons produced in the U.S. in 2020, we sold approximately 3.2 million tons, or almost 1%. Only a small portion of overall U.S. thermal production is shipped internationally, but there is strong competition in the domestic market. Approximately 21% of our thermal coal sold was shipped internationally in 2020. 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. The key factors of this competition are delivered coal price, coal quality and characteristics, transportation costs from the mine to the customer and the reliability of supply. Competition from coal with lower production costs shipped from other coal basins has resulted in increased competition for coal sales in the Appalachian region.

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.

Employees

As of December 31, 2020, we had approximately 3,250 employees, all of which are full-time employees, with the United Mine Workers of America ("UMWA") representing approximately 3% of these employees. 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. Relations with organized labor are important to our success, and we believe that we have good relations with our employees.

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.

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 extent of which we cannot predict. In particular, the new presidential administration and congressional majorities have expressed support for policies that may result in stricter environmental, health and safety standards applicable to our operations and those of our customers. We intend to continue to comply with these 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, 2020, we had accrued $165.1 million for reclamation liabilities and mine closures, including $25.0 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 Bankruptcy Court entered an order approving the sale by Blackjewel of the Belle Ayr and Eagle Butte mines located in the PRB (the “Western Assets”) to Eagle Specialty Materials, LLC (“ESM”). The closing of the ESM acquisition (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 that 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, 2021, is $0.28 per ton on surface-mined coal and $0.12 per ton on deep-mined coal. Future legislation is expected to extend these fees through 2028 at reduced rates. For the years ended December 31, 2020 and 2019, we recorded $2.3 million and $2.5 million, respectively, 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, 2020 and 2019, our posted third-party surety bond amount in all states where we operate was approximately $351.6 million and $343.7 million, respectively, including portions attributable to discontinued operations of $134.2 million and $119.9 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, 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 (PM) set by the Obama-Biden Administrations without changes.

In October 2015, the EPA finalized the NAAQS for ozone pollution and reduced the limit to 70 parts per billion (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 challenging the EPA's 2015 Ozone NAAQS (*Murray Energy Corp. v. EPA)* is currently pending in the D.C. Circuit. In April 2017, the D.C. Circuit Court granted the EPA's motion to indefinitely delay any decision on the challenges pending the EPA's possible reconsideration of the rule. In July 2018, the D.C. Circuit Court returned the matter to its active docket and in August 2018, the EPA indicated to the court that it would not be revising the 2015 standards at this time. In August 2019, the D.C. Circuit upheld 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.

- *NOx SIP Call.* The NOx 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 NOx SIP Call regulations to allow states to establish alternative monitoring and reporting requirements for certain sources.

- *Cross-State Air Pollution Rule.* In June 2011, the EPA finalized the CSAPR, which required 28 states in the Midwest and 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 rule 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. 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 CSAPR, 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 Cross-State Air Pollution Rule Update in order to fully address 21 state's outstanding interstate pollution transport obligations for the 2008 ozone National Ambient Air Quality Standards. Starting in the 2021 ozone season, the proposed rule would require additional emissions reductions of nitrogen oxides from power plants in 12 states. The public comment period for the proposal closed on December 14, 2020. However, on January 20, 2021 the new presidential administration announced a freeze with respect to all pending rulemaking. Accordingly, the outcome of this rulemaking may result in stricter standards than those contained in the proposed rule.

- *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".

  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. will withdraw from the Paris Agreement. This withdrawal formally took effect on November 4, 2020. However, on January 20, 2021, President Biden issued a statement formally accepting the Paris Agreement on behalf of the U.S., which triggers a 30 day process for rejoining the accord. In addition, numerous U.S. governors, mayors and businesses have pledged their commitments to the goals of the Paris Agreement. These commitments 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 CO_2/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 CO_2/MWh-gross, and subcritical conditions for smaller units to meet a standard of 2,000 lb CO_2/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 CO_2 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.

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 January 13, 2021, the COE published its final rule reissuing and modifying a portion of its Nationwide permits. The COE reissued and modified 12 existing Nationwide permits and issued four new permits. The 12 reissued permits replace the 2017 versions which now expire March 14, 2021. The COE 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 U.S. Army Corps of Engineers (the "USACE") 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. 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. The Navigable Waters Protection Rule is designed to fulfill a February 2017 executive order calling on the EPA and the USACE to develop a rule consistent with Justice Antonin Scalia's plurality opinion in the 2006 Supreme Court decision, *Rapanos v. United States*, that CWA jurisdiction attaches only to "navigable waters" and other waters with a relatively permanent flow, such as rivers or lakes. The Navigable Waters Protection Rule narrows the jurisdiction of the CWA relative to Clean Water Rule by, among other things, excluding from the scope of the definition of "waters of the United States" certain ephemeral streams and wetlands not adjacent to jurisdictional water bodies. The Navigable Water Protection Rule is likely to be the subject of legal challenges and its ultimate impact on our operations is uncertain.

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 passage of the MINER Act enforcement scrutiny has increased, including more inspection hours at mine sites, increased numbers of inspections and increased issuance of the number and severity of enforcement actions 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. 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, 2019, the trust fund was funded by an excise tax on production of up to $0.50 per ton for deep-mined coal and up to $0.25 per ton for surface-mined coal, neither amount to exceed 2% of the gross sales price. Effective January 1, 2020, the trust fund is funded by an excise tax on coal sold of up to $1.10 per ton for deep-mined coal and up to $0.55 per ton for surface-mined coal, neither amount to exceed 4.4% of the gross sales price. Absent further legislation, beginning in 2022, the trust fund will be funded by an excise tax on coal sold of up to $0.50 per ton for deep-mined coal and up to $0.25 per ton for surface-mined coal, neither amount to exceed 2% of the gross sales price. The excise tax does not apply to coal shipped outside the United States. For the years ended December 31, 2020 and 2019, we recorded $5.1 million and $2.9 million excluding portions attributable to discontinued operations, 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. These changes could have a material impact on our costs expended in association with the federal black lung program. For former mining employees meeting statutory eligibility standards for federal black lung benefits, we maintain a trust fund and insurance coverage to cover the cost of present and future claims. We may also be liable under state laws for black lung claims that are covered through the trust and insurance policies. The liability associated with present and future claims for black lung benefits is difficult to estimate, and the trust and insurance policies may be insufficient to cover all such liability.

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.

Alpha Natural Resources, Inc.'s Plan of Reorganization. Alpha Natural Resources, Inc's plan of reorganization approved on July 7, 2016 and effective as of July 26, 2016.

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 "Bankruptcy Court"). The 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 PRB.

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.

Assigned reserves. Coal that is planned to be mined at an operation that is currently operating, currently idled, or for which permits have been submitted and plans are eventually to develop the operation.

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 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.

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

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 "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.

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.

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 depends on four important criteria: volatility, which affects coke yield; the level of impurities, including sulfur and ash, which affect coke quality; composition, which affects coke strength; and basic characteristics, which affect coke oven safety. Met coal typically has a particularly high BTU but low ash and sulfur content.

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.

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 reserves. Reserves for which quantity and grade and/or quality are computed from information similar to that used for proven reserves, but the sites for inspection, sampling and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven reserves, is high enough to assume continuity between points of observation.

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 reserves. Reserves for which quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; grade and/or quality are computed from the results of detailed sampling; and the sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well defined that size, shape, depth and mineral content of reserves are well-established.

Reclamation. The 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.

Recoverable reserves. Metric tons of mineable coal that can be extracted and marketed after deduction for coal to be left behind within the seam (i.e., pillars left to hold up the ceiling, coal not economical to recover within the mine) and adjusted for reasonable preparation and handling losses.

Reserve. That part of a mineral deposit that could be economically and legally extracted or produced at the time of the reserve determination.

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

Sulfur. One of the elements present in varying quantities in coal that contributes to environmental degradation when coal is burned. Sulfur dioxide is produced as a gaseous by-product of coal combustion.

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 in this prospectus are stated in short tons, unless otherwise indicated.

Unassigned reserves. Coal that is likely to be mined in the future, but which is not considered assigned reserves.

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.

UMWA. United Mine Workers of America.

Item 1A. *Risk Factors*

Investment in our common stock is subject to various risks, including risks and uncertainties inherent in our business. 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, our ability to obtain financing and other services, competition, decreased demand for coal, Chinese governmental policies, loss of customers, customer creditworthiness and global economic disruptions.

- *Risks relating to regulatory and legal developments*, such as those associated with regulatory requirements and costs, climate change regulations, environmental laws and treaties, unfavorable tax actions, decreases in demand for energy, environmental cleanup costs, permit approvals, maintenance of internal controls and healthcare regulations and costs.

- *Risks relating to our operations*, such as those associated with mining and other conditions beyond our control, decreased demand for coal, the complexity of mining in Central Appalachia, disruptions in transportation services, the availability of skilled workers, product specification requirements, higher than estimated employee benefit, property reclamation or mine closure costs, the availability of coal reserves, unionization, cybersecurity, our dependence upon third parties and our ability to make capital investments.

- *Risks relating to our liquidity*, such as those associated with our indebtedness, our ability to obtain or renew surety bonds, limitations imposed on us by our credit facility, access to funds when needed and debt service.

- *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, 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

Sustained low coal prices, or further declines in coal prices, would adversely affect 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:

- the demand for domestic and foreign coal and coke, which depends significantly on the demand for steel and electricity;
- 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, electricity generators and residential users;
- the legal, regulatory and tax environment for our industry and those of our customers;
- adverse weather, climactic or other natural conditions, natural disasters and pandemics (such as the COVID-19 virus);
- the quantity, quality and pricing of coal available in the resale market;
- the effects of worldwide energy conservation or emissions measures;
- competition from other suppliers of coal and other energy sources; and
- the proximity to and availability, reliability and cost of transportation and port facilities.

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

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

Alpha produces met coal that is sold directly to both U.S. and foreign steel industry customers and indirectly to foreign steel industry customers through U.S.-based companies. Met coal accounted for approximately 87% of our coal revenues for the year ended December 31, 2020. 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. On March 8, 2018, President Trump signed proclamations imposing a 25% tariff on imports of steel mill products and a 10% tariff on imports of wrought and unwrought aluminum. Alpha's export customers include foreign steel producers who may be affected by the tariffs to the extent their production is imported into the U.S. Conversely, demand for met coal from our domestic customers may increase. Retaliatory tariffs by foreign nations have already limited international trade and may adversely impact global economic conditions.

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. If 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 could 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 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 these institutions from providing financing, insurance 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 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 upon our business, financial condition and results of operations.

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 foreign 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 to soft market conditions.

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 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. See "Business-Competition." Similarly, currency fluctuations could adversely affect demand for U.S. steel.

Lower demand for U.S. coal exports would reduce our foreign sales, could negatively impact our revenues and could result in downward pressure on domestic coal prices.

Coal export revenues accounted for approximately 64% of our coal revenues for the year ended December 31, 2020. In addition to the factors described above, demand for and viability of U.S. coal exports is dependent upon a number of factors outside of our control, including ocean freight rates and port and shipping capacity.

In addition, trade conflicts between the United States and other nations that result in the imposition of barriers to trade, such as import tariffs, could materially and adversely affect the international demand and pricing for our coal. The United States has, during recent years, taken actions, including imposing tariffs on certain goods imported into the U.S., that have resulted in other nations adopting retaliatory measures such as the imposition of tariffs upon goods imported from the U.S. into those nations. China and Turkey, for example, have imposed tariffs upon the importing of coal from the U.S. The imposition of these trade barriers by other nations has already resulted in adverse effects upon our international sales of coal, including reduced demand and prices. If these barriers endure, or are enhanced, our coal exports may further decline, and increased domestic supply could cause competition among coal producers in the U.S. to intensify, potentially resulting in additional downward pressure on domestic coal prices and our business, financial condition or results of operations.

Chinese governmental policies as well as trade disputes in Asian markets may continue to be detrimental to the global coal market and negatively affect our business, financial condition or results of operations.

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 impact worldwide coal demand, supply and prices. During the past several years, the Chinese government has initiated a number of anti-smog measures aimed at reducing hazardous air emissions through temporary production capacity restrictions within the steel, coal and coal-fired power sectors. It is possible that policy changes by the Chinese government may be detrimental to the global coal market and, thus, negatively affect our business, financial condition or results of operations. Further, similar actions by government entities in countries that produce and/or consume large quantities of coal and other energy related commodities, such as India, may have a material impact on the prices at which we sell our product.

In addition, certain trade disputes in Asian markets, such as those between China and Australia, have resulted in increased coal supply and lower prices in non-Asian markets to which we export our coal. Should these disputes endure, continued lower prices in certain of our export markets may have significant negative effects on our business, financial condition or 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.

Our largest customer during the year ended December 31, 2020 accounted for approximately 16% of our total revenues, and coal sales to our 10 largest customers accounted for approximately 63% of our total revenues. These customers could decide to discontinue purchasing coal from us in the volumes that they have previously purchased or decide to not purchase at all. If several of these customers were concurrently to reduce their purchases of coal significantly, 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 this concurrent loss or significant reduction were to happen, our revenues and profitability could be materially and adversely affected.

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 13% of our coal revenues for the year ended December 31, 2020. 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, which is in turn influenced by the global economy and the weather, among other factors (for example, mild North American winters typically result in lower demand);
- 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, which may change over time as a result of, among other things, technological developments and state or federal regulatory or statutory fuel subsidies or energy use mandates;
- increasingly stringent environmental and other governmental regulations, including air emission standards for coal-fired power plants; and
- the coal inventories of utilities.

Many North American electric power generators have shifted from coal to natural gas-fired power plants. Despite ongoing advancements in the availability and deployment of advanced coal and emissions reduction technologies, we expect that new power plants in the near-term will be fired by natural gas because natural gas-fired plants are less expensive to construct than coal-fired plants and natural gas is a cleaner-burning fuel, with plentiful supplies and low cost at the current time. Increasingly stringent regulations have also reduced the number of new power plants being built, particularly coal-fired power plants. 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.

We may not be able to extend our existing long-term supply contracts or enter into new ones, and our existing supply contracts may contain certain provisions that may reduce protection from short-term coal price volatility, which could adversely affect the profitability of our operations.

A substantial portion of our thermal coal is sold under long-term contracts. When our current contracts with customers expire or are otherwise renegotiated, our customers may decide to purchase fewer tons of coal than in the past or on terms, including pricing terms, that are not as favorable to us as the terms under our current agreements.

Further, in large part as a result of increasing and frequently changing regulation, and natural gas pricing, electric power generators are increasingly less willing to enter into long-term coal supply contracts, instead purchasing higher percentages of coal under short-term supply contracts. This industry shift away from long-term supply contracts could adversely affect us and the level of our revenues. For example, our having fewer customers with a contractual obligation to purchase coal from us increases the risk that we will not have a consistent market for our production and may require us to sell more coal in the spot market, where prices may be lower than we would expect a customer to pay for a contractually committed supply. Spot market prices also tend to be more volatile than contractual prices, which could result in decreased revenues. Our met coal supply contracts are typically priced on an annual, quarterly or spot basis, and therefore our met coal sales are particularly sensitive to repricing risk.

Generally, our long-term thermal coal agreements contain committed volumes and fixed prices for a certain number of periods during which thermal coal will be delivered. However, some of our long-term thermal coal agreements do not provide for a fixed price through the life of the agreement. Those agreements contain price negotiation and similar provisions for upcoming unpriced contract periods, with negotiations generally considering either then current market prices and/or relevant market indices. Failure of the parties to agree on a price can lead to termination of the contract or litigation, the outcome of which would be uncertain. Further, during periods of economic weakness, some of our customers experience lower demand for their products and services and may be unwilling to take all of their contracted tonnage or may request a lower price. Customers may make similar requests when market prices drop significantly. Any adjustment or negotiation leading to a significantly lower contract price could result in decreased revenues. Accordingly, supply contracts with terms of one year or more may provide only limited protection during adverse or volatile market conditions.

Competition with natural gas and renewable energy sources, and factors affecting these industries could have an adverse impact on coal demand.

Our coal competes with natural gas and renewable energy sources, and the price of these sources can therefore affect coal sales. The natural gas market has been volatile historically and prices in this market are subject to wide fluctuations in response to relatively minor changes in supply and demand. Changes in supply and demand could be prompted by any number of factors, such as worldwide and regional economic and political conditions; the level of global exploration, production and inventories; natural gas prices; and transportation availability. If natural gas prices decline significantly, it could lead to reduced coal sales and have a material adverse effect on our financial condition, results of operations and cash flows.

In addition, state and federal mandates for increased use of electricity from renewable energy sources also have an impact on the market for our coal. Several states have enacted legislative mandates requiring electricity suppliers to use renewable energy sources to generate a certain percentage of power. There have been numerous proposals to establish a similar uniform, national standard although none of these proposals have been enacted to date. Possible advances in technologies and incentives, such as tax credits, to enhance the economics of renewable energy sources could make these sources more competitive with coal. Any reduction in the amount of coal consumed by electric power generators could reduce the price of coal that we mine and sell, thereby reducing our revenues and materially and adversely affecting our business and results of operations.

Our 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, our customer base may change with deregulation as utilities sell or transfer their power plants to their non-regulated affiliates or third parties that may be less creditworthy, thereby increasing the risk we bear for customer payment default. These new power plant owners or operators may have credit ratings that are below investment grade or may become below investment grade after we enter into contracts with them.

Customers in other countries may be subject to other pressures and uncertainties that may affect their ability to pay, including trade barriers, exchange controls and local economic and political conditions. For the year ended December 31, 2020 we derived 64% of our coal revenues from coal sales made to customers outside the U.S.

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 (such as the COVID-19 virus), trade disputes and armed conflicts. 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.

Risks Relating to Regulatory and Legal Developments

The extensive 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;
- 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;
- 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
- 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 (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 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 and the current Congressional majorities have expressed support for policies that may result in stricter environmental, health and safety standards applicable to our operations and those of our customers. For example, on January 20, 2021, President Biden issued an executive order titled "Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis," (the "January 20 Executive Order") which among other things, calls for a review of regulations and other executive actions issued during the prior Presidential administration to assess whether they are, in the view of the Biden administration, sufficiently protective of public health and the environment, including with respect to climate change, and consistent with science. See "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.

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, such as the Fourth and Fifth Assessment Report of the Intergovernmental Panel on Climate Change, have also engendered 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 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 coal.

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, but the Biden administration has subsequently taken steps to rejoin the agreement;
- 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; and
- private litigation against coal companies or power plant operators based on GHG-related concerns.

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. 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 and the current Congressional majorities have 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 several material assumptions. From time to time, we determine that the impact of one or more such laws, regulations or policies, if adopted and ultimately implemented as proposed, may result in materially adverse impacts on our operations, financial condition or cash flow; however, we often are not able to reasonably quantify such impacts.

In general, 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 CSAPR to significantly reduce nitrogen oxide and sulfur dioxide emissions from power plants in 28 states, and the CSAPR Update Rule, issued in September 2016, requiring further reductions in nitrogen oxides in 2017 in 22 states subject to CSAPR during the summertime ozone season;
- 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;
- 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; 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, 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.

The U.S. Internal Revenue Service could withhold tax refunds and assert a right to setoff against pre-petition claims of the U.S. government during the Alpha Natural Resources, Inc. bankruptcy, which could have a material adverse effect upon the Company's assets.

As of December 31, 2020, the Company has recorded $64.2 million of current federal income tax receivable and associated interest receivable of $5.2 million related to a net operating loss ("NOL") carryback claim. Because the federal government was a creditor in the Alpha Natural Resources, Inc. bankruptcy proceedings, it is possible that the federal government could withhold some or all of the tax refund attributable to the NOL carryback claim and assert a right to set off the tax refund and associated interest receivable against its prepetition bankruptcy claims. If the IRS were to take such actions, the Company would vigorously defend its position. However, if the Company were unsuccessful, there could be a material, adverse effect upon the Company's assets.

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 price of coal. If prices for coal are not competitive, our business, financial condition and results of operations may be materially harmed.

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.

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. 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 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.

In January 2020, the EPA and the U.S. Army Corps of Engineers (the “USACE”) 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. 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. The Navigable Waters Protection Rule is designed to fulfill a February 2017 executive order calling on the EPA and the USACE to develop a rule consistent with Justice Antonin Scalia's plurality opinion in the 2006 Supreme Court decision, Rapanos v. United States, that CWA jurisdiction attaches only to “navigable waters” and other waters with a relatively permanent flow, such as rivers or lakes. The Navigable Waters Protection Rule narrows the jurisdiction of the CWA relative to Clean Water Rule by, among other things, excluding from the scope of the definition of “waters of the United States” certain ephemeral streams and wetlands not adjacent to jurisdictional water bodies. The Navigable Water Protection Rule is likely to be the subject of legal challenges and potential reconsideration by the EPA and its ultimate impact on our operations is uncertain.

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 2017 nationwide permit program was recently reissued in January 2017. 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.

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.

We have obligations under various settlement agreements with state and federal agencies in relation to the Alpha Natural Resources, Inc. Restructuring settlement and the failure to meet these obligations could result in the termination of such settlement agreements, the revocation of permits and regulatory or enforcement actions, among other things.

In connection with the Alpha Natural Resources, Inc. Restructuring settlement, we and Alpha Natural Resources, Inc. entered into a number of agreements with state and federal agencies regarding the funding, performance and bonding of reclamation and other environmental restoration obligations with respect to mine properties retained by Alpha Natural Resources, Inc. under the Alpha Natural Resources, Inc. Restructuring. These agreements have been amended from time to time in connection with sales by Alpha Natural Resources, Inc. of certain of these properties. These agreements require us to make periodic payments to certain accounts designated to fund reclamation and other activities at various facilities and also impose bonding, reporting and other obligations. A failure to fulfill our obligations under these agreements could be considered an event of default which could result in, among other things, the cancellation of certain permits, a termination of the agreement and the taking of any regulatory or enforcement action that an agency enforcing such default is permitted to take.

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.

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, particularly in the areas of non-income taxes, or obligations arising from audits of royalties previously paid to government entities, 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.

Federal healthcare legislation could adversely affect our financial condition and results of operations.

In March 2010, the Patient Protection and Affordable Care Act (“PPACA”) was enacted, potentially impacting our cost of providing healthcare benefits to our employees and workers’ compensation benefits related to occupational disease resulting from coal workers’ pneumoconiosis (black lung disease). The PPACA has both short-term and long-term implications on benefit plan standards. Implementation of this legislation is expected to extend through 2020. In the short term, our healthcare costs could increase due to, among other things, an increase in the maximum age for covered dependents to receive benefits, changes to benefits for occupational disease related illnesses, the elimination of lifetime dollar limits per covered individual and restrictions on annual dollar limits per covered individual. In the long term, our healthcare costs could increase due to, among other things, an excise tax on “high cost” plans and the elimination of annual dollar limits per covered individual.

The PPACA planned to impose a 40% excise tax on employers beginning in 2022 to the extent that the value of their healthcare plan coverage exceeds certain dollar thresholds. In December 2019, the excise tax was repealed before it could take effect, effective for taxable years beginning after December 31, 2019.

Risks Relating to Our Operations

Our coal mining production and delivery is subject to conditions and events 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 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;
- 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 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.

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.

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 mines. In addition, compared to mines in other areas of the country, permitting, licensing and other environmental and regulatory requirements 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.

Disruptions in transportation services 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, 2020, 80% 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 would result in increased internal coal handling costs and decreased shipping volumes, and if we are unable to find alternatives, our business could be adversely affected. Some of our operations are serviced by a single rail carrier. Due to the difficulty in arranging alternative transportation, these operations are particularly at risk to disruptions, capacity issues or other difficulties with that carrier's transportation services, which could adversely impact our revenues and results of operations.

We also depend upon trucks, beltlines, ocean vessels and barges to deliver coal to our customers. In addition, much of our eastern 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, terrorist attacks and other events could impair our ability to supply coal to our customers, resulting in decreased shipments and revenue. Disruption in shipment levels over longer 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.

We require a skilled workforce to run our business. If we cannot hire and retain qualified persons 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 and supervisors. The demand for skilled employees sometimes causes a significant constriction of the labor supply resulting in higher labor costs. We, along with the mining industry generally, are currently facing a shortage of experienced mechanics and certified electricians. When coal producers compete for skilled miners, recruiting challenges can occur and employee turnover rates can increase, which negatively affect operating efficiency and costs. If a shortage of skilled workers exists and we are unable to train or retain the necessary number of miners, it could adversely affect our productivity, costs and ability to 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 these 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.

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 BTU, 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.

Expenditures for certain employee benefits could be materially higher than we have anticipated, which could increase our costs and adversely affect our financial results.

We are responsible for certain liabilities under a variety of benefit plans and other arrangements with employees. The unfunded status of these obligations, including discontinued operations, as of December 31, 2020 included $97.4 million of workers’ compensation obligations, net of expected insurance receivable amounts, $218.7 million of pension obligations, and $124.8 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.

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 $165.1 million as of December 31, 2020, based upon permit requirements and the historical experience at our operations, and depend on a number of variables involving assumptions and estimation and therefore may be subject to change, including the estimated future asset retirement costs and the timing of such costs, estimated proven reserves, assumptions involving profit margins of third-party contractors, inflation rates and discount rates. Furthermore, these obligations are primarily unfunded. If these accruals are insufficient or our liability in a particular year is greater than currently anticipated, our future operating results and financial position could be adversely affected. 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 “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.

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

We base our estimates of our economically recoverable coal reserves on engineering, economic and geological data assembled and analyzed by our staff, including various engineers and geologists, and periodically reviewed by outside firms. Our estimates as to the quantity and quality of the coal in our reserves are updated annually to reflect production of coal from the reserves and new drilling, engineering or other data. These estimates depend upon a variety of factors and assumptions, 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 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 group of properties, classifications of reserves 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 may vary materially from estimates. Accordingly, our estimates may not accurately reflect our actual reserves. Any inaccuracy in our reserve estimates could result in lower than expected revenues, higher than expected costs, decreased profitability and asset impairments.

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 more than 35 years, we have not yet developed the mines for all our reserves. 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 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, this 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.

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 95% of our hourly workforce was union-free as of December 31, 2020. 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.

As is the case with our union-free operations, the 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.

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 these 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.

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 cybersecurity attacks or failures, threats to physical security, and extreme weather conditions or other natural disasters. Strategic targets, such as energy-related assets, may be at greater risk of future terrorist or cybersecurity attacks than other targets in the U.S. These disruptions or any significant increases in energy prices that follow could result in government-imposed price controls. Our insurance 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. 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.

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.

Decreased availability or increased costs of key equipment and materials, including certain items mandated by regulations, or of coal that we purchase from third parties, could impact 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.

In addition, the prices we pay for these materials are strongly influenced by the global commodities markets. Coal mines consume large quantities of commodities such as steel, copper, rubber products, explosives and diesel and other liquid fuels. 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. Some materials, such as steel, are needed to comply with regulatory requirements. Furthermore, operating expenses at our mining locations are sensitive to changes in certain variable costs, including diesel fuel prices, which is one of our largest variable costs. Our results depend on our ability to adequately control our costs. Any increase in the price we pay for diesel fuel will have a negative impact on our results of operations. A rapid or significant increase in the cost of these commodities could increase our mining costs because we have limited ability to negotiate lower prices.

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

We have previously and may in the future contract with third-parties to operate or reclaim certain of our mines, and our results of operations could be adversely affected if these operators are ineffective.

We have previously and may in the future contract with third parties to operate certain of our mines. Under these 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 these contracts or are otherwise ineffective, it could increase our costs and therefore lower our earnings and adversely affect our results of operations.

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.

In the future, we may 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:

- 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;
- 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 do 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.

We may be unable to generate sufficient taxable income from future operations, or other circumstances could arise, which may limit our ability to utilize our tax net operating loss carryforwards or maintain our deferred tax assets.

We acquired the core coal assets of Alpha Natural Resources, Inc. as part of Alpha Natural Resources, Inc.'s bankruptcy restructuring in transactions intended to be treated as a tax-free reorganization for U.S. federal income tax purposes. As a result of these transactions, we inherited the tax basis of the core assets and the net operating loss and other carryforwards of Alpha Natural Resources, Inc. These carryforwards and tax basis were subject to reduction on December 31, 2016 due to the cancellation of indebtedness resulting from Alpha Natural Resources, Inc.'s bankruptcy restructuring. Due to the change in ownership, the net operating loss and other carryforwards will be subjected to limitations on their use in future years and additional changes in ownership in future years may further reduce the annual amount of the net operating loss and other carryforwards available to be utilized. In addition, we do not have a long history of operating results, and if we are unable to generate profits in the future, we may be unable to utilize these carryforwards. As of December 31, 2020, a valuation allowance of $263.4 million has been provided on federal and state net operating loss carryforwards and other deferred tax assets not expected to provide future tax benefits.

Negative or unexpected consequences of the Tax Cuts and Jobs Act could affect our business.

On December 22, 2017, legislation commonly referred to as the Tax Cuts and Jobs Act (the "TCJA") significantly revised U.S. federal corporate tax law by, among other things, reducing the U.S. federal corporate income tax rate to 21%, eliminating the corporate alternative minimum tax, providing a mechanism for corporations to monetize alternative minimum tax credits ("AMT Credits"), limiting the tax deduction for interest expense to 30% of adjusted earnings, allowing immediate expensing for certain new investments, and, effective for net operating losses arising in taxable years beginning after December 31, 2017, eliminating net operating loss carrybacks, permitting indefinite net operating loss carryforwards, and limiting the use of net operating loss carryforwards to 80% of current year taxable income.

There are a number of uncertainties and ambiguities as to the interpretation and application of many of the provisions in the TCJA. In the absence of guidance of these issues, we will use what we believe are reasonable interpretations and assumptions in interpreting and applying the TCJA for purposes of determining our cash tax liabilities and results of operations, which may change as we receive additional clarification and implementation guidance and as the interpretation of the TCJA evolves over time. It is possible that the IRS could issue subsequent guidance or take positions on audit that differ from the interpretations and assumptions that we previously made, which could have a material adverse effect on our cash tax liabilities, results of operations and financial condition.

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 or, if available, may result in dilution or not be available on satisfactory terms. 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.

Changes in the fair value of liabilities that are marked to market could cause volatility in our earnings.

Pursuant to the Second Amended Joint Plan of Reorganization of Debtors and Debtors in Possession, dated May 27, 2016, as modified and confirmed by the Order Confirming Second Amended Joint Plan of Reorganization of Debtors and Debtors in Possession, as Modified (Docket No. 3038), entered by the Bankruptcy Court on July 12, 2016, we have contingent revenue payment obligations to certain of Alpha Natural Resources Inc.'s creditors, which are recorded at fair market value and marked to market in each reporting period, with changes in value reflected in earnings. Any change in fair value can have a significant impact on our earnings from period to period, including in the future.

Risks Relating to Our Liquidity

Our indebtedness exposes us to various risks.

At December 31, 2020, we had $599.6 million of indebtedness outstanding before discounts and issuance costs applied for financial reporting, of which $62.9 million will mature in the next three years.

Our indebtedness could have important consequences to our business. 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.

Our ability to meet our 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. We may incur additional secured or unsecured indebtedness in the future, subject to compliance with covenants in our existing debt agreements. 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.

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, 2020, we had outstanding surety bonds with third parties of approximately $351.6 million, including $134.2 million attributable to discontinued operations. 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.

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

In connection with the Credit Agreement entered into on June 14, 2019, we incurred indebtedness of approximately $562 million under a term loan credit facility to refinance existing indebtedness and to pay related fees and expenses. The term loan credit facility matures on June 14, 2024. The term loan credit facility permits us, subject to approval of the administrative agent and the lenders providing the financing, to request incremental term loans up to an aggregate amount of $50 million subject to certain conditions in the Credit Agreement, in increments not less than $25 million or the remaining availability.

In connection with the consummation of the Merger, we entered into the Amended and Restated Asset-Based Revolving Credit Agreement with a borrowing capacity of $225 million under a revolving credit facility. The revolving credit facility matures on April 3, 2022. Additionally, as a result of the Merger, we assumed a letter of credit agreement and a credit and security agreement which, among other things, include letter of credit facilities that provide for the issuance of letters of credit. The terms of our credit facilities impose operating and financial restrictions on us, which may limit our ability to respond to changing business and economic conditions. The revolving loan facility permits us, subject to approval of the administrative agent and the lenders providing the financing, to request incremental revolving commitment increases up to an aggregate amount of $50 million, in increments not less than $10 million or the remaining availability and subject to specified conditions.

We are subject to various operating and financial covenants under the term loan and revolving credit facilities which restrict our ability to, among other things, 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. Any failure to comply with these covenants may constitute a breach under the term loan and revolving credit facilities which could result in the acceleration of all or a substantial portion of any outstanding indebtedness and termination of revolving credit commitments under the term loan and revolving credit facilities. Our inability to maintain our term loan and revolving credit facilities could materially adversely affect our liquidity and our business. As of

December 31, 2020, we are in compliance with the operating and financial covenants under the term loan and revolving credit facilities.

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 credit facility.

The terms of our borrowing arrangements limit our and our subsidiaries' ability to take certain actions, which may limit our operating and financial flexibility and adversely affect our business.

Our borrowing arrangements contain, and any future borrowing arrangements are also likely to contain, a number of significant restrictions and covenants that limit our ability and our subsidiaries' ability to, among other things, incur additional indebtedness, enter into sale and leaseback transactions, pay dividends, make redemptions and repurchases of certain capital stock, make loans and investments, create liens, sell certain assets, engage in transactions with affiliates, and merge or consolidate with other companies or sell substantially all of our assets. 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.

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.

The need to maintain capacity for required letters of credit 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 November 9, 2018, we entered into the Amended and Restated Asset-Based Revolving Credit Agreement. Additionally, as a result of the Merger, we assumed an Amended and Restated Letter of Credit Agreement and a Credit and Security Agreement. Each of these agreements includes, among other things, provisions that provide for the issuance of letters of credit. Obligations secured by letters of credit may increase in the future. 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 and could negatively impact our ability to fund future working capital, capital expenditure or other general corporate requirements.

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 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. Compliance with these requirements may strain our resources and we may be unable to comply with these requirements in a timely or cost-effective manner.

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 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. These broad market fluctuations may adversely affect the trading price of our common stock. Securities class action litigation has often been instituted against companies following periods of volatility in the overall market and in the market price of a company's securities. Such litigation, if instituted against us, could result in very substantial costs, divert our management's attention and resources and harm our business, operating results and financial condition.

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 in us.

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. 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. In addition, the issuance of shares of common stock upon the exercise of outstanding options and warrants would result in dilution to the interests of other stockholders.

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

Our amended and restated certificate of incorporation authorizes us to issue, without the approval of our stockholders, one or more classes or series of preferred stock having such designations, preferences, limitations and relative rights, including preferences over our common stock respecting dividends and distributions, as our board of directors 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.

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 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 our board of directors to determine the rights, preferences, privileges and restrictions of unissued series of preferred stock, without any vote or action by our stockholders. Thus, our board of directors 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 is the sole and exclusive forum 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. 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 2. ***Properties***

Coal Reserves

We prepared our estimates of reserves which were audited by Marshall Miller & Associates, Inc. (“MM&A”), and MM&A reviewed our methodology, assumptions and reserve factors utilized in determining these estimates. In the few instances where MM&A recommended revisions to reserve figures, MM&A worked with our team to modify reserve estimates. MM&A relied on their independent pro-forma economic analysis for ultimate reserve determination; this analysis is further discussed in the Costs & Calculations section below.

We maintain an internal staff of engineers and geoscience professionals who work closely with independent reserve engineers to ensure the integrity, accuracy and timeliness of the data used to calculate our estimated reserves. Our internal technical team members meet with independent reserve engineers periodically to discuss the assumptions and methods used in the proved reserve estimation process. We provide historical information to the independent reserve engineers for their properties, such as ownership interest, production, test data, commodity prices and operating and development costs.

These estimates are based on engineering, economic and geologic data, coal ownership information and current and proposed mine plans. Our proven and probable coal reserves are reported as “recoverable coal reserves,” which is the portion of the coal that could be economically and legally extracted or produced at the time of the reserve determination, taking into account mining recovery and preparation plant yield. These estimates are periodically updated to reflect past coal production, new drilling information and other geologic or mining data. Acquisitions or dispositions of coal properties will also change these estimates. Changes in mining methods may increase or decrease the recovery basis for a coal seam, as will changes in preparation plant processes.

“Reserves” are defined by the SEC Industry Guide 7 as that part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve determination. Industry Guide 7 divides reserves between “proven (measured) reserves” and “probable (indicated) reserves,” which are defined as follows:

- “Proven (Measured) Reserves.” Reserves for which (a) quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; grade and/or quality are computed from the results of detailed sampling and (b) the sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well defined that size, shape, depth and mineral content of reserves are well-established.

- “Probable (Indicated) Reserves.” Reserves for which quantity and grade and/or quality are computed from information similar to that used for proven (measured) reserves, but the sites for inspection, sampling and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven (measured) reserves, is high enough to assume continuity between points of observation.

On October 31, 2018, the SEC voted to adopt amendments to modernize the property disclosure requirements for mining registrants and related guidance under the Securities Act of 1933 and the Securities Exchange Act of 1934. The final rules provide a three-year transition period, thus, we will be required to begin to comply with the new rules for the fiscal year beginning on January 1, 2021 (reported in the Annual Report on Form 10-K for the year ended December 31, 2021). We are in the process of assessing the impact the new rules will have on our disclosures.

As of December 31, 2020, we had estimated reserves totaling 623.5 million tons, of which 331.1 million tons, or 53%, were “assigned” recoverable reserves that were either being mined, were controlled and accessible from a then active mine, or located at idled facilities where limited capital expenditures would be required to initiate operations when conditions warrant. The remaining 292.4 million tons were classified as “unassigned,” representing coal at currently non-producing locations that we anticipate mining in the future, but which would require significant additional development capital before operations could begin.

The following table provides the location and coal reserves associated with each of our reportable segments and related significant mines as of December 31, 2020:

As of December 31, 2020
(in thousands of short tons)[1]

Reportable Segment	Location	Reserves	Recoverable Reserves		Assigned [2]	Unassigned [2]
			Proven	Probable		
Met						
Deep Mine 41	Virginia	28,475	22,685	5,790	28,475	—
Road Fork 52	West Virginia	32,803	23,238	9,565	16,759	16,044
Black Eagle	West Virginia	17,387	12,483	4,904	17,387	—
Lynn Branch	West Virginia	23,228	12,298	10,930	23,228	—
Met Other	Virginia, West Virginia, Pennsylvania	517,206	370,410	146,796	240,816	276,390
CAPP - Thermal	West Virginia	4,444	3,911	533	4,444	—
		623,543	445,025	178,518	331,109	292,434

[1] 1 short ton is equivalent to 0.907185 metric tons.
[2] "Assigned" reserves represent recoverable reserves that are either currently being mined, reserves that are controlled and accessible from a currently active mine or reserves at idled facilities where limited capital expenditures would be required to initiate operations. "Unassigned" reserves represent coal at currently non-producing locations that would require significant additional capital spending before operations begin.

The following table provides the breakdown between the quantity of reserves that is currently covered by an active mining permit or not permitted and the quantity of reserves that is met coal or thermal coal associated with each of our reportable segments and related significant mines as of December 31, 2020:

As of December 31, 2020
(in thousands of short tons)[1]

	Reserve Control		By Permit Status		By Coal Market Type [2]	
Reportable Segment	Owned	Leased	Permitted	Not Permitted	Met	Thermal
Met						
Deep Mine 41	—	28,475	25,673	2,802	28,475	—
Road Fork 52	237	32,566	2,422	30,381	32,803	—
Black Eagle	—	17,387	12,944	4,443	17,387	—
Lynn Branch	813	22,415	14,479	8,749	23,228	—
Met Other	61,983	455,223	123,185	394,021	460,281	56,925
CAPP - Thermal	—	4,444	4,444	—	—	4,444
	63,033	560,510	183,147	440,396	562,174	61,369

[1] 1 short ton is equivalent to 0.907185 metric tons.
[2] Classification of coal market type is based on available quality information and is subject to change with shifting market conditions and/or additional exploration.

The following table provides a summary of the quality of our reserves for each of our reportable segments and related significant mines as of December 31, 2020:

As of December 31, 2020
(in thousands of short tons)[1]

			Sulfur Content			Average Btu	
Reportable Segment	**Reserves**	**Primary Coal Type [2]**	**<1% Sulfur**	**1 - 1.5% Sulfur**	**>1.5% Sulfur**	**>12,500**	**<12,500**
Met							
Deep Mine 41	28,475	MVM	28,475	—	—	28,475	—
Road Fork 52	32,803	LVM	32,803	—	—	32,803	—
Black Eagle	17,387	HVM	17,387	—	—	17,387	—
Lynn Branch	23,228	HVM	23,228	—	—	23,228	—
Met Other	517,206	HVM	397,385	114,837	4,984	497,865	19,341
CAPP - Thermal	4,444	T	4,444	—	—	—	4,444
	623,543		503,722	114,837	4,984	599,758	23,785

[1] 1 short ton is equivalent to 0.907185 metric tons.
[2] Coal Type: T=Thermal; LVM=Low-Vol. Metallurgical Coal; MVM=Mid-Vol. Metallurgical Coal; HVM=High-Vol. Metallurgical Coal.

The following table provides a summary of information regarding our mining operations for each of our reportable segments and related significant mines as of December 31, 2020:

				Transportation	
Reportable Segment	**Reserves (thousands of short tons) [1]**	**Type [2]**	**Mining Equipment [3]**	**Rail**	**Other [4]**
Met					
Deep Mine 41	28,475	U	CM	CSX	B
Road Fork 52	32,803	U	CM	NS	B
Black Eagle	17,387	U	CM	CSX	B
Lynn Branch	23,228	U	CM	CSX	—
Met Other	517,206	U/S	CM/S/H	NS/CSX	B
CAPP - Thermal	4,444	U	CM	NS/CSX	B
	623,543				

[1] 1 short ton is equivalent to 0.907185 metric tons.
[2] Type of Mine: S = Surface; U = Underground.
[3] Mining Equipment: S = Shovel/Excavator/Loader/Trucks; CM = Continuous Miner; H = Highwall Miner.
[4] Transportation: B = Barge Loadout availability.

The following table provides a summary of information regarding our significant preparation plants as of December 31, 2020:

	Preparation Plant(s)		
Reportable Segment/Preparation Plant	**Capacity (short tons per hr) [1]**	**Utilization %**	**Source of Power**
Met			
McClure	1,000	64%	MP2 Energy
Toms Creek	1,050	37%	Old Dominion
Bandmill	1,200	51%	AEP
Marfork	2,400	47%	AEP

[1] 1 short ton is equivalent to 0.907185 metric tons.

Information provided within the previous tables concerning our properties has been prepared in accordance with applicable U.S. federal securities laws. All mineral reserve estimates have been prepared in accordance with SEC Industry Guide 7.

The following is a summary of information regarding our significant coal terminal as of December 31, 2020:

- DTA coal export terminal in eastern Virginia. We own a 65.0% interest in DTA which 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.

Costs & Calculations

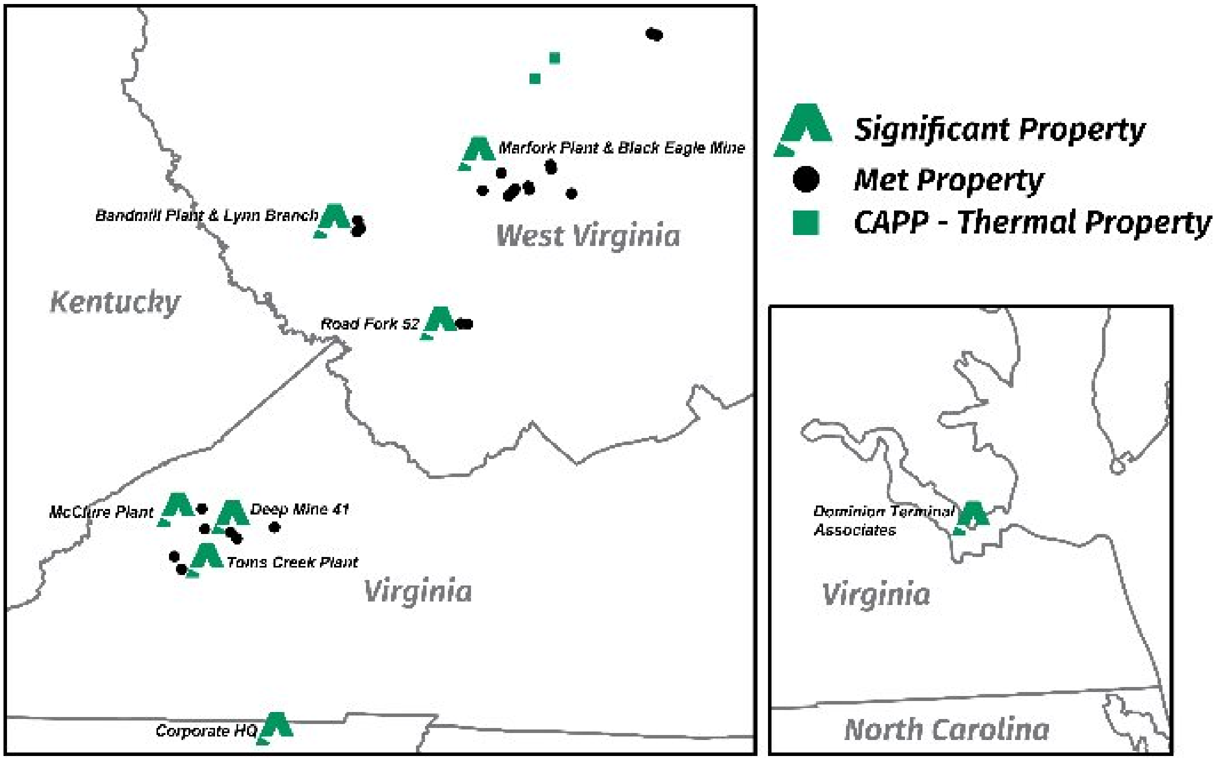
Coal tonnage is classified as reserve when demonstrating profit on a fully loaded cost basis. Pro forma testing conducted by MM&A demonstrated that our reserves are expected to generate cash and are profitable on a fully loaded cost basis. Fully loaded costs were compared to two-year historical sales realizations for all potential reserve areas. The classification of reserves is dependent upon the sum of all costs normalized to a per clean ton basis being less than the two-year historical sales price. The two-year historical sales price includes the following average prices categorized by coal qualities:

Coal Qualities	Two Year Historical Average Sales Price
Met High-Vol. A	$106
Met High-Vol. B	$91
Met Mid-Vol.	$105
Met Low-Vol.	$117
Thermal - CAPP-Thermal	$56

For the surface mining reserve areas, the mining costs were estimated using the surface mining overburden ratios. Direct mining costs were estimated for labor, blasting, fuel and lubrication supplies, repairs and maintenance, operating supplies and other costs. The pro forma mining cost estimates for underground mining areas began with the computation of representative total seam thickness for each area evaluated. The clean-tons-per-foot of mining advance was calculated to support mine production and productivity calculations.

All underground and highwall miner coal reserves are expected to require washing to remove coal partings and out-of-seam contamination. Preparation plant yield was calculated by multiplying the in-seam recovery, out-of-seam contamination and plant efficiency factors. In-seam recovery factors were obtained based upon the relative percentages of coal and rock within the seam. Direct mining costs were estimated for labor, supplies, maintenance and repairs, mine power and other direct mining costs. Sales, general and administration and environmental cost allocations were based on values typically observed by MM&A. Sales variable costs for royalty payments, black lung excise tax and reclamation fees were calculated, along with cost components for other indirect mining costs.

The following map shows the locations of our significant properties, Met properties, CAPP - Thermal properties, and corporate headquarters.



Item 3. ***Legal Proceedings***

For a description of the Company's legal proceedings, refer to Note 23, 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*

Price range of our common stock

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. The following table sets forth, for the periods indicated, the high and low sales prices per share of our common stock reported on the New York Stock Exchange.

2020	High	Low
First Quarter	$9.15	$1.93
Second Quarter	$6.57	$2.25
Third Quarter	$10.26	$3.02
Fourth Quarter	$14.32	$6.37

2019	High	Low
First Quarter	$66.00	$54.21
Second Quarter	$61.87	$49.62
Third Quarter	$52.71	$25.37
Fourth Quarter	$28.12	$5.70

As of December 31, 2020, there were 155 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.

Dividend Policy

The payment of dividends is subject to certain limitations, as set forth in the terms of our borrowing arrangements. During the years ended 2020 and 2019, we did not pay dividends on our common stock. Our Board of Directors periodically evaluates the initiation of dividends. There is no assurance as to the amount or payment of dividends in the future because they will be subject to ongoing Board of Directors review and authorization will be based on a number of factors, including terms of our borrowing arrangements, business and market conditions, our future financial performance and other capital priorities.

Repurchase of Common Stock

The following table summarizes information about shares of common stock that were repurchased during the fourth quarter of 2020.

	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Share Repurchase Programs (2)	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Programs (2),(3)
October 1, 2020 through October 31, 2020	—	$ —	—	$ 67,552
November 1, 2020 through November 30, 2020	—	$ —	—	$ 67,552
December 1, 2020 through December 31, 2020	3,138	$ 12.15	—	$ 67,552
	3,138		—	$ 67,552

(1) We are 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.
(2) Refer to Note 13 for information on our capital return program. As of October 1, 2019, we suspended the Company Repurchase Plan.
(3) 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 $16 thousand of stock repurchase related fees.

There were no repurchases related to warrants during the current quarter. Refer to Note 2 for information on warrants.

Item 6. *Selected Financial Data*

Not applicable.

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, 2020 and 2019. 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.

COVID-19 Pandemic

In the first quarter of 2020, the COVID-19 virus was declared a pandemic by the World Health Organization. The COVID-19 pandemic has had negative impacts on our business, results of operations, financial condition and cash flows. A continued period of reduced demand for our products could have additional significant adverse consequences for us. The full extent of the impact of the COVID-19 pandemic on our operational and financial performance will depend on certain developments, including the duration and spread of the outbreak, its impact on our customers and suppliers and the range of governmental and community reactions to the pandemic, which are still uncertain and cannot be fully predicted at this time.

Our current view of the impacts of COVID-19 to our customers and suppliers is discussed below in the Market Overview section. Additionally, refer to Note 1 for further discussion of the COVID-19 pandemic impacts to our business and Note 8 for discussion of certain strategic actions announced during the second quarter of 2020 with respect to two of our thermal coal mining complexes in an effort to strengthen our financial performance.

All of our coal mining operations have been classified as essential in the states in which we operate. Health and safety are core values of our company and are the foundation for how we manage every aspect of our business and we have therefore implemented policies, procedures and prevention measures to protect our employees during the COVID-19 pandemic. These policies, procedures and prevention measures include, but are not limited to, employee communications on COVID-19 monitoring and precautionary measures, enhanced cleaning and sterilization practices, limiting contractor access to our properties, limiting business travel, implementing social distancing measures by staggering shift times, limiting in-person meetings and meeting sizes, and remote work arrangements. We will continue to evaluate these policies, procedures and precautionary measures for further enhancements as necessary.

We have not experienced significant supply chain disruptions due the COVID-19 pandemic.

We will continue to monitor these developments closely.

Market Overview

After a challenging COVID-19-afflicted 2020, the Australian metallurgical coal market, despite the recent pullback, has shown meaningful improvement in 2021, with the Australian premium hard coking coal index increasing 22% to $125 per metric ton in February since the end of 2020 and up nearly 30% since the lows of mid-November. The Atlantic High-Vol A indices have also performed well after reaching a low of $105 in mid-August. The current February High-Vol A index of $153 per metric ton represents a 46% improvement over that period.

Global manufacturing and industrial production are continuing to show growth in all regions with the manufacturing Purchasing Managers' Indices ("PMI") above 50.0 in the U.S., Europe, Brazil, India, and China, which is showing the most moderate growth among the major producers at 50.9 in January.

According to the World Steel Association ("WSA"), December 2020 crude steel production increased compared to the same prior year period in most producing regions. The overall global growth of 5.8% was driven mainly by China and Europe, which grew 7.7% and 10.2% in December, respectively. For the full year 2020, the global crude steel production declined less than 1%, led by declines in North America and Europe. South America, driven by Brazil, exhibited the strongest growth of any major region, growing 16.3% in December. Turkey posted one of the most impressive growth rates in December and for the full year 2020, with crude steel production growing 17.7% and 6.0%, respectively.

We concluded our 2021 domestic metallurgical contracts during the fourth quarter. In total, we expect to sell approximately 14 million tons from our Met reportable segment in 2021. Coking coal prices have risen from their recent multi-year lows. Trade tensions between Australia and China forced Australian coal producers to sell at weaker prices and encouraged them to divert and re-sell cargoes away from China into other markets. These actions have opened the door for some North American coking coal producers to ship coal to China at higher netbacks than could be achieved in Atlantic Basin markets. In addition, we see demand improving in other Atlantic Basin and global markets. At this time, we are also seeing increasing spot interest from both domestic and seaborne customers and prospective customers which has resulted in an increase in shipments. In connection with the company's strategic focus on optimizing metallurgical coal production, we continue striving to match our available products and production with customer demand.

On the thermal side, as of the end of December, natural gas prices had not achieved the previously forecasted levels. Since that time, severe weather has resulted in high consumer electricity demand and lower production, causing stress to the energy system in parts of the U.S. Natural gas inventories are poised to drop to the five-year average for the first time since the end of 2019. Central Appalachian thermal coal burns for our customers have not yet been significantly impacted by the fluctuations in natural gas prices, but we have seen increased demand associated with the recent severe weather. Internationally, Europe and Asia have also experienced severe weather, supply disruptions, reductions in coal capacity, and high carbon prices limiting opportunities for US coal. Increased ESG pressures are forcing expedited closure of coal units, domestically and abroad. US thermal coal producers are continuing to reduce investment in thermal coal. At our thermal coal operations, we have significantly reduced inventories at all locations, and are matching our sales and production to make for an orderly transition to lower thermal coal production.

As Alpha enters 2021, we continue to evaluate market conditions for our metallurgical coal products amid residual uncertainty attributable to the continued concern around the COVID-19 pandemic. The impact the pandemic may have on demand continues to make customer demand forecasts challenging. Depending on the extent and timing of global and national economic stabilization and recovery, our ability to estimate future customer coal demand remains limited.

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 U.S. supplier of metallurgical products for the steel industry. We operate high-quality, cost-competitive coal mines across the CAPP coal basin. As of December 31, 2020, our operations consisted of twenty-three active mines and eight coal preparation and load-out facilities, with approximately 3,250 employees. We produce, process, and sell met coal and thermal coal from operations located in Virginia and West Virginia. 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, 2020, we had 623.5 million tons of reserves, including 445.0 million tons of proven reserves and 178.5 million tons of probable 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 eastern 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, the Company closed a transaction to sell the Eagle Butte and Belle Ayr mines located in the PRB, Wyoming, along with related coal reserves, equipment, infrastructure and other real properties. Refer to Note 3 for information related to Blackjewel's subsequent bankruptcy filing and the related 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). This transaction accelerated our strategic exit from thermal coal production to shift our focus toward met coal production. The former PRB and NAPP operations results of operations and financial position are reported as discontinued operations in the Consolidated Financial Statements. The historical information in the accompanying Notes to the Consolidated Financial Statements has been restated to reflect the effects of these former operations being reported as discontinued operations in the Consolidated Financial Statements. Refer to Note 3 for further information on discontinued operations.

For the years ended December 31, 2020 and 2019, sales of met coal were 12.3 million tons and 12.7 million tons, respectively, and accounted for approximately 80% and 74%, respectively, of our coal sales volume. Sales of thermal coal were

3.2 million tons and 4.5 million tons, respectively, and accounted for approximately 20% and 26%, 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 Europe, Asia and the Americas. Our sales of thermal coal were made primarily to large utilities and industrial customers throughout the United States. For the years ended December 31, 2020 and 2019 approximately 64% and 61%, 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, 2020, we have two reportable segments: Met and CAPP - Thermal. To conform to the current period reportable segments presentation, the prior periods have been restated to reflect the change in reportable segments. Refer to Note 25 for additional disclosures on reportable segments including export coal revenue information.

Other Business Developments

Effective February 1, 2021, we changed our corporate name from Contura Energy, Inc. to Alpha Metallurgical Resources, Inc. for rebranding 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.

During the third quarter of 2020, we joined three other regional coal producers to restructure and expand the Virginia Coal & Energy Alliance to now be named the Metallurgical Coal Producers Association (“MCPA”) focusing on issues specific to the U.S.’s metallurgical coal industry. Additionally, the MCPA will focus on our regional presence by combining forces to advance collective interests.

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 March 11, 2021, we have sales commitments as follows:

	2021		
	Tons	**% Priced**	**Average Realized Price per Ton**
Met	14.0 million	56 %	$80.68
CAPP - Thermal	1.5 million	100 %	$57.57

Due to the significant uncertainty in the worldwide coal markets due to COVID-19, there is risk of reduction in future shipments due to deferrals and utilization of force majeure clauses in customer contracts.

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 improve productivity and control costs. Our primary expenses are for operating supply costs, repair and maintenance expenditures, cost of purchased coal, royalties, current wages and benefits, post-employment benefits, freight and handling costs and taxes incurred in selling our coal. 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, 2020 and 2019 are discussed in these “Results of Operations” presented below.

Year Ended December 31, 2020 Compared to the Year Ended December 31, 2019

Revenues

The following table summarizes information about our revenues during the years ended December 31, 2020 and 2019:

	Year Ended December 31,		Increase (Decrease)	
(In thousands, except for per ton data)	**2020**	**2019**	**$ or Tons**	**%**
Coal revenues	$ 1,413,124	$ 1,995,934	$ (582,810)	(29.2)%
Other revenues	3,063	5,346	(2,283)	(42.7)%
Total revenues	$ 1,416,187	$ 2,001,280	$ (585,093)	(29.2)%
Tons sold	15,513	17,152	(1,639)	(9.6)%

Coal revenues. Coal revenues decreased $582.8 million, or 29.2%, for the year ended December 31, 2020 compared to the prior year period. The decrease was primarily due to lower total overall coal sales volume and lower coal sales realization within our Met operations as a result of a weaker pricing environment impacted by the COVID-19 pandemic. Refer to the Coal Operations section below for further detail on coal revenues for the year ended December 31, 2020 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, 2020 and 2019:

	Year Ended December 31,		Increase (Decrease)	
(In thousands)	2020	2019	$	%
Cost of coal sales (exclusive of items shown separately below)	$ 1,281,011	$ 1,667,768	$ (386,757)	(23.2)%
Depreciation, depletion and amortization	139,885	215,757	(75,872)	(35.2)%
Accretion on asset retirement obligations	26,504	23,865	2,639	11.1 %
Amortization of acquired intangibles, net	9,214	(3,189)	12,403	388.9 %
Selling, general and administrative expenses (exclusive of depreciation, depletion and amortization shown separately above)	57,356	78,953	(21,597)	(27.4)%
Merger-related costs	—	1,090	(1,090)	(100.0)%
Asset impairment and restructuring	83,878	66,324	17,554	26.5 %
Goodwill impairment	—	124,353	(124,353)	(100.0)%
Total other operating income:				
Mark-to-market adjustment for acquisition-related obligations	(8,750)	(3,564)	(5,186)	(145.5)%
Other income	(2,223)	(974)	(1,249)	(128.2)%
Total costs and expenses	$ 1,586,875	$ 2,170,383	$ (583,508)	(26.9)%

Cost of coal sales. Cost of coal sales decreased $386.8 million, or 23.2%, for the year ended December 31, 2020 compared to the prior year period. The decrease was primarily driven by a decrease in tons sold in the current period relative to the prior year period and decreased costs of purchased coal, salaries and wages expense, and supplies and maintenance expense as we continue to improve our cost management to achieve operational efficiencies, partially offset by inventory change during the current period.

Depreciation, depletion and amortization. Depreciation, depletion and amortization decreased $75.9 million, or 35.2%, for the year ended December 31, 2020 compared to the prior year period. The decrease in depreciation, depletion and amortization primarily related to asset impairments and revisions to asset retirement obligations during the current period.

Accretion on asset retirement obligations. Accretion on asset retirement obligations increased $2.6 million, or 11.1%, for the year ended December 31, 2020 compared to the prior year period. This increase was primarily driven by an increase in our credit-adjusted risk-free rate used to discount the obligations relative to the prior period.

Amortization of acquired intangibles, net. Amortization of acquired intangibles, net increased $12.4 million, or 388.9%, for the year ended December 31, 2020 compared to the prior year period. The increase was primarily driven by the lower current period amortization related to below-market acquired coal supply agreements.

Selling, general and administrative. Selling, general and administrative expenses decreased $21.6 million, or 27.4%, for the year ended December 31, 2020 compared to the prior year period. This decrease in expense was primarily related to decreases of $6.5 million in severance expense, $5.8 million in wages and benefits expense, $4.8 million in stock compensation expense, and $4.4 million in professional fees, partially offset by an increase of $2.8 million in incentive pay.

Asset impairment and restructuring. Asset impairment and restructuring increased $17.6 million, or 26.5%, for the year ended December 31, 2020 compared to the prior year period. Asset impairment and restructuring for the year ended December 31, 2020 includes long-lived asset impairments of $81.0 million related to asset groups recorded within the Met and CAPP - Thermal reporting segments and restructuring expense of $2.9 million recorded in CAPP - Thermal and All Other reporting segments. Asset impairment and restructuring for the year ended December 31, 2019 includes a long-lived asset impairment of $60.2 million related to asset groups recorded within the Met and CAPP - Thermal reporting segments and an asset impairment of $6.2 million primarily related to the write-off of prepaid purchased coal as a result of Blackjewel’s Chapter 11 bankruptcy filing on July 1, 2019. Refer to Note 8 for further information.

Mark-to-market adjustment for acquisition-related obligations. The mark-to-market adjustment for acquisition-related obligations resulted in an increase to income of $5.2 million for the year ended December 31, 2020 compared to the adjustment in the prior year period. This increase was related to changes in underlying fair value assumptions during the current period. Refer to Note 18 for Contingent Revenue Obligation fair value input assumptions.

Other (Expense) Income

The following table summarizes information about our other (expense) income during the year ended December 31, 2020 and 2019:

	Year Ended December 31,		Increase (Decrease)	
(In thousands)	2020	2019	$	%
Other (expense) income:				
Interest expense	$ (74,528)	$ (67,521)	$ (7,007)	(10.4)%
Interest income	7,027	7,247	(220)	(3.0)%
Loss on modification and extinguishment of debt	—	(26,459)	26,459	100.0 %
Equity loss in affiliates	(3,473)	(6,874)	3,401	49.5 %
Miscellaneous loss, net	(1,972)	(10,195)	8,223	80.7 %
Total other expense, net	$ (72,946)	$ (103,802)	$ 30,856	29.7 %

Interest expense. Interest expense increased $7.0 million, or 10.4%, for the year ended December 31, 2020 compared to the prior year period, primarily due to an increase in debt outstanding and higher interest rates related to the debt facilities in place during the current period. Additionally, there were higher letters of credit fees due to higher letters of credit outstanding under the Amended and Restated Asset-Based Revolving Credit Agreement during the current period. Refer to Note 15 for additional information.

Loss on modification and extinguishment of debt. During the year ended December 31, 2019, we recorded a loss on modification of debt of $0.3 million, primarily related to modification fees paid under the refinance, and a loss on extinguishment of debt of $26.2 million, primarily related to the write-off of outstanding debt discounts and unamortized debt issuance costs under the Amended and Restated Credit Agreement dated November 9, 2018. Refer to Note 15 for additional information.

Miscellaneous loss, net. Miscellaneous loss, net decreased $8.2 million, or 80.7%, for the year ended December 31, 2020 compared to the prior year period, primarily due to the decrease in pension obligation net periodic benefit costs due to lower settlement charges and interest costs during the current period. Refer to Note 20 for additional information.

Income Tax Benefit

The following table summarizes information about our income tax benefit during the years ended December 31, 2020 and 2019:

	Year Ended December 31,		Increase (Decrease)	
(In thousands)	2020	2019	$	%
Income tax benefit	$ 2,164	$ 53,287	$ (51,123)	(95.9)%

Income taxes. Income tax benefit of $2.2 million was recorded for the year ended December 31, 2020 on a loss from continuing operations before income taxes of $243.6 million. The effective tax rate differs from the federal statutory rate of 21% primarily due to the increase in the valuation allowance, partially offset by the permanent impact of percentage depletion deductions, the impact of state income taxes, net of federal tax impact, and a refund of previously sequestered AMT Credits.

Income tax benefit of $53.3 million was recorded for the year ended December 31, 2019 on a loss from continuing operations before income taxes of $272.9 million. The effective tax rate differs from the federal statutory rate of 21% primarily due to the impact of state income taxes, net of federal impact, the net operating loss carryback benefit, and the permanent impact of the percentage depletion deduction, mostly offset by the impact of the non-deductible goodwill impairment and the increase in the valuation allowance. Refer to Note 19 for additional information.

Coal Operations

Our Met operations consist of high-quality met coal mines, including Deep Mine 41, Road Fork 52, Black Eagle, and Lynn Branch. The coal produced by Met operations is predominantly met coal with some amounts of thermal coal being produced as a byproduct of mining.

Our CAPP - Thermal operations consist of one underground thermal coal mine. The coal produced by CAPP - Thermal operations is predominantly thermal coal with some met coal byproduct.

Our All Other category is not included in our Coal Operations results of operations as it includes general corporate overhead and corporate assets and liabilities and the elimination of certain intercompany activity.

Refer to Item 1. Business and Notes 24 and 25 for additional financial information about reportable segments and geographic areas.

Non-GAAP Financial Measures

The discussion below contains "non-GAAP financial measures." These are financial measures which 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 "Adjusted cost of produced coal sold." 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. 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, idled and closed mine costs and coal inventory acquisition accounting impacts. 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. We also use Adjusted cost of produced coal sold to distinguish the cost of captive produced coal from the effects of purchased coal. 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, and capital investments.

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, 2020 and 2019:

(In thousands, except for per ton data)	Year Ended December 31, 2020 Met	CAPP - Thermal	All Other	Consolidated
Coal revenues	$ 1,263,855	$ 148,880	$ 389	$ 1,413,124
Less: Freight and handling fulfillment revenues	(206,509)	(12,940)	—	(219,449)
Non-GAAP Coal revenues	$ 1,057,346	$ 135,940	$ 389	$ 1,193,675
Tons sold	13,070	2,437	6	15,513
Non-GAAP Coal sales realization per ton	$ 80.90	$ 55.78	$ 64.83	$ 76.95
Cost of coal sales (exclusive of items shown separately below)	$ 1,140,556	$ 136,944	$ 3,511	$ 1,281,011
Depreciation, depletion and amortization - production [(1)]	124,060	20,453	(5,885)	138,628
Accretion on asset retirement obligations	14,214	9,285	3,005	26,504
Amortization of acquired intangibles, net	12,889	(3,775)	100	9,214
Total Cost of coal sales	$ 1,291,719	$ 162,907	$ 731	$ 1,455,357
Less: Freight and handling costs	(206,509)	(12,940)	—	(219,449)
Less: Depreciation, depletion and amortization - production [(1)]	(124,060)	(20,453)	5,885	(138,628)
Less: Accretion on asset retirement obligations	(14,214)	(9,285)	(3,005)	(26,504)
Less: Amortization of acquired intangibles, net	(12,889)	3,775	(100)	(9,214)
Less: Idled and closed mine costs	(16,640)	(8,973)	(3,267)	(28,880)
Non-GAAP Cost of coal sales	$ 917,407	$ 115,031	$ 244	$ 1,032,682
Tons sold	13,070	2,437	6	15,513
Non-GAAP Cost of coal sales per ton	$ 70.19	$ 47.20	$ 40.67	$ 66.57

(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, 2020 Met	CAPP - Thermal	All Other	Consolidated
Coal revenues	$ 1,263,855	$ 148,880	$ 389	$ 1,413,124
Less: Total Cost of coal sales (per table above)	(1,291,719)	(162,907)	(731)	(1,455,357)
GAAP Coal margin	$ (27,864)	$ (14,027)	$ (342)	$ (42,233)
Tons sold	13,070	2,437	6	15,513
GAAP Coal margin per ton	$ (2.13)	$ (5.76)	$ (57.00)	$ (2.72)
GAAP Coal margin	$ (27,864)	$ (14,027)	$ (342)	$ (42,233)
Add: Depreciation, depletion and amortization - production [(1)]	124,060	20,453	(5,885)	138,628
Add: Accretion on asset retirement obligations	14,214	9,285	3,005	26,504
Add: Amortization of acquired intangibles, net	12,889	(3,775)	100	9,214
Add: Idled and closed mine costs	16,640	8,973	3,267	28,880
Non-GAAP Coal margin	$ 139,939	$ 20,909	$ 145	$ 160,993
Tons sold	13,070	2,437	6	15,513
Non-GAAP Coal margin per ton	$ 10.71	$ 8.58	$ 24.17	$ 10.38

(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, 2019			
	Met	CAPP - Thermal	All Other	Consolidated
Coal revenues	$ 1,709,863	$ 285,390	$ 681	$ 1,995,934
Less: Freight and handling fulfillment revenues	(242,049)	(34,133)	—	(276,182)
Non-GAAP Coal revenues	$ 1,467,814	$ 251,257	$ 681	$ 1,719,752
Tons sold	12,926	4,218	8	17,152
Non-GAAP Coal sales realization per ton	$ 113.56	$ 59.57	$ 85.13	$ 100.27
Cost of coal sales (exclusive of items shown separately below)	$ 1,389,619	$ 274,320	$ 3,829	$ 1,667,768
Depreciation, depletion and amortization - production [1]	152,835	57,483	4,025	214,343
Accretion on asset retirement obligations	9,599	10,929	3,337	23,865
Amortization of acquired intangibles, net	10,389	(13,578)	—	(3,189)
Total Cost of coal sales	$ 1,562,442	$ 329,154	$ 11,191	$ 1,902,787
Less: Freight and handling costs	(242,049)	(34,133)	—	(276,182)
Less: Depreciation, depletion and amortization - production [1]	(152,835)	(57,483)	(4,025)	(214,343)
Less: Accretion on asset retirement obligations	(9,599)	(10,929)	(3,337)	(23,865)
Less: Amortization of acquired intangibles, net	(10,389)	13,578	—	3,189
Less: Idled and closed mine costs	(8,699)	(2,702)	(3,164)	(14,565)
Less: Cost impact of coal inventory fair value adjustment [2]	(4,751)	(3,458)	—	(8,209)
Non-GAAP Cost of coal sales	$ 1,134,120	$ 234,027	$ 665	$ 1,368,812
Tons sold	12,926	4,218	8	17,152
Non-GAAP Cost of coal sales per ton	$ 87.74	$ 55.48	$ 83.13	$ 79.80

[1] Depreciation, depletion and amortization - production excludes the depreciation, depletion and amortization related to selling, general and administrative functions.
[2] The cost impact of the coal inventory fair value adjustment as a result of the Merger was completed during the three months ended June 30, 2019.

(In thousands, except for per ton data)	Year Ended December 31, 2019 Met	CAPP - Thermal	All Other	Consolidated
Coal revenues	$ 1,709,863	$ 285,390	$ 681	$ 1,995,934
Less: Total Cost of coal sales (per table above)	(1,562,442)	(329,154)	(11,191)	(1,902,787)
GAAP Coal margin	$ 147,421	$ (43,764)	$ (10,510)	$ 93,147
Tons sold	12,926	4,218	8	17,152
GAAP Coal margin per ton	$ 11.40	$ (10.38)	$ (1,313.75)	$ 5.43
GAAP Coal margin	$ 147,421	$ (43,764)	$ (10,510)	$ 93,147
Add: Depreciation, depletion and amortization - production [1]	152,835	57,483	4,025	214,343
Add: Accretion on asset retirement obligations	9,599	10,929	3,337	23,865
Add: Amortization of acquired intangibles, net	10,389	(13,578)	—	(3,189)
Add: Idled and closed mine costs	8,699	2,702	3,164	14,565
Add: Cost impact of coal inventory fair value adjustment [2]	4,751	3,458	—	8,209
Non-GAAP Coal margin	$ 333,694	$ 17,230	$ 16	$ 350,940
Tons sold	12,926	4,218	8	17,152
Non-GAAP Coal margin per ton	$ 25.82	$ 4.08	$ 2.00	$ 20.46

[1] Depreciation, depletion and amortization - production excludes the depreciation, depletion and amortization related to selling, general and administrative functions.
[2] The cost impact of the coal inventory fair value adjustment as a result of the Merger was completed during the three months ended June 30, 2019.

(In thousands, except for per ton data)	Year Ended December 31, 2020	2019	Increase (Decrease) $	%
Tons sold:				
Met operations	13,070	12,926	144	1.1 %
CAPP - Thermal operations	2,437	4,218	(1,781)	(42.2)%
Non-GAAP Coal revenues:				
Met operations	$ 1,057,346	$ 1,467,814	$ (410,468)	(28.0)%
CAPP - Thermal operations	$ 135,940	$ 251,257	$ (115,317)	(45.9)%
Non-GAAP Coal sales realization per ton:				
Met operations	$ 80.90	$ 113.56	$ (32.66)	(28.8)%
CAPP - Thermal operations	$ 55.78	$ 59.57	$ (3.79)	(6.4)%
Average	$ 76.95	$ 100.27	$ (23.32)	(23.3)%

Non-GAAP segment coal revenues. Met operations non-GAAP coal revenues decreased $410.5 million, or 28.0%, for the year ended December 31, 2020 compared to the prior year period. The decrease in Met operations non-GAAP coal revenues was primarily due to lower non-GAAP coal sales realization of $32.66 per ton as a result of a weaker pricing environment resulting from the impacts of the COVID-19 pandemic.

CAPP - Thermal operations non-GAAP coal revenues decreased $115.3 million, or 45.9%, for the year ended December 31, 2020 compared to the prior year period. The decrease in CAPP - Thermal operations non-GAAP coal revenues was due to lower coal sales volumes of 1.8 million tons and lower non-GAAP coal sales realization of $3.79 per ton as a result of a weaker pricing environment resulting from the impacts of the COVID-19 pandemic.

(In thousands, except for per ton data)	Year Ended December 31, 2020	2019	Increase (Decrease) $	%
Non-GAAP Cost of coal sales:				
Met operations	$ 917,407	$ 1,134,120	$ (216,713)	(19.1)%
CAPP - Thermal operations	$ 115,031	$ 234,027	$ (118,996)	(50.8)%
Non-GAAP Cost of coal sales per ton:				
Met operations	$ 70.19	$ 87.74	$ (17.55)	(20.0)%
CAPP - Thermal operations	$ 47.20	$ 55.48	$ (8.28)	(14.9)%
Non-GAAP Coal margin per ton:				
Met operations	$ 10.71	$ 25.82	$ (15.11)	(58.5)%
CAPP - Thermal operations	$ 8.58	$ 4.08	$ 4.50	110.3 %

Non-GAAP cost of coal sales. Met operations non-GAAP cost of coal sales decreased $216.7 million, or 19.1%, for the year ended December 31, 2020 compared to the prior year period. The decrease in Met operations non-GAAP cost of coal sales was primarily driven by decreased costs of purchased coal, salaries and wages expense, supplies and maintenance expense, and royalties and taxes, partially offset by inventory change during the current period.

CAPP - Thermal operations non-GAAP cost of coal sales decreased $119.0 million, or 50.8%, for the year ended December 31, 2020 compared to the prior year period. The decrease in CAPP - Thermal operations non-GAAP cost of coal sales was primarily due to a decrease in tons sold in the current period relative to the prior year period and decreased supplies and maintenance expense and salaries and wages expense, partially offset by inventory change during the current period.

Our non-GAAP cost of coal sales includes purchased coal costs. In the following tables, we calculate Adjusted cost of produced coal sold as non-GAAP cost of coal sales less purchased coal costs.

(In thousands, except for per ton data)	Year Ended December 31, 2020 Met	CAPP - Thermal	All Other	Consolidated
Non-GAAP Cost of coal sales	$ 917,407	$ 115,031	$ 244	$ 1,032,682
Less: cost of purchased coal sold	(85,769)	(925)	—	(86,694)
Adjusted cost of produced coal sold	$ 831,638	$ 114,106	$ 244	$ 945,988
Produced tons sold	11,941	2,423	6	14,370
Adjusted cost of produced coal sold per ton [(1)]	$ 69.65	$ 47.09	$ 40.67	$ 65.83

(1) Cost of produced coal sold per ton for our operations is calculated as non-GAAP cost of produced coal sold divided by produced tons sold.

(In thousands, except for per ton data)	Year Ended December 31, 2019 Met	CAPP - Thermal	All Other	Consolidated
Non-GAAP Cost of coal sales	$ 1,134,120	$ 234,027	$ 665	$ 1,368,812
Less: cost of purchased coal sold	(237,681)	(6,976)	—	(244,657)
Adjusted cost of produced coal sold	$ 896,439	$ 227,051	$ 665	$ 1,124,155
Produced tons sold	10,727	4,091	8	14,826
Adjusted cost of produced coal sold per ton [(1)]	$ 83.57	$ 55.50	$ 83.13	$ 75.82

(1) Cost of produced coal sold per ton for our operations is calculated as non-GAAP cost of produced coal sold divided by produced tons sold.

Segment Adjusted EBITDA

Segment Adjusted EBITDA for our reportable segments is a financial measure. This non-GAAP financial measure is presented as a supplemental measure and is not intended to replace financial performance measures determined 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. Segment Adjusted EBITDA is presented because management believes it is a useful indicator of the financial performance of our coal operations. The following tables present a reconciliation of net income (loss) to Adjusted EBITDA for the years ended December 31, 2020 and 2019:

	Year Ended December 31, 2020			
(In thousands)	Met	CAPP - Thermal	All Other	Consolidated
Net loss from continuing operations	$ (77,519)	$ (52,520)	$ (111,431)	$ (241,470)
Interest expense	(2,014)	6	76,536	74,528
Interest income	(63)	—	(6,964)	(7,027)
Income tax benefit	—	—	(2,164)	(2,164)
Depreciation, depletion and amortization	124,060	20,453	(4,628)	139,885
Non-cash stock compensation expense	289	8	4,600	4,897
Mark-to-market adjustment - acquisition-related obligations	—	—	(8,750)	(8,750)
Accretion on asset retirement obligations	14,214	9,285	3,005	26,504
Asset impairment and restructuring (1)	46,317	36,719	842	83,878
Management restructuring costs (2)	501	5	435	941
Loss on partial settlement of benefit obligations	1,607	(328)	1,687	2,966
Amortization of acquired intangibles, net	12,889	(3,775)	100	9,214
Adjusted EBITDA	$ 120,281	$ 9,853	$ (46,732)	$ 83,402

(1) Asset impairment and restructuring for the year ended December 31, 2020 includes long-lived asset impairments of $81.0 million related to asset groups recorded within the Met and CAPP - Thermal reporting segments and restructuring expense of $2.9 million recorded in CAPP - Thermal and All Other reporting segments. Refer to Note 8 for further information.

(2) Management restructuring costs are related to severance expense associated with senior management changes during the three months ended March 31, 2020.

	Year Ended December 31, 2019			
(In thousands)	Met	CAPP - Thermal	All Other	Consolidated
Net income (loss) from continuing operations	$ 7,944	$ (97,398)	$ (130,164)	$ (219,618)
Interest expense	(1,209)	23	68,707	67,521
Interest income	(100)	—	(7,147)	(7,247)
Income tax benefit	—	—	(53,287)	(53,287)
Depreciation, depletion and amortization	152,835	57,483	5,439	215,757
Merger-related costs	—	—	1,090	1,090
Non-cash stock compensation expense	1,494	71	10,783	12,348
Mark-to-market adjustment - acquisition-related obligations	—	—	(3,564)	(3,564)
Accretion on asset retirement obligations	9,599	10,929	3,337	23,865
Loss on modification and extinguishment of debt	—	—	26,459	26,459
Asset impairment (1)	15,034	50,993	297	66,324
Goodwill impairment (2)	124,353	—	—	124,353
Cost impact of coal inventory fair value adjustment (3)	4,751	3,458	—	8,209
Gain on assets acquired in an exchange transaction (4)	(9,083)	—	—	(9,083)
Management restructuring costs (5)	—	—	7,720	7,720
Loss on partial settlement of benefit obligations	(1)	—	6,447	6,446
Amortization of acquired intangibles, net	10,389	(13,578)	—	(3,189)
Adjusted EBITDA	$ 316,006	$ 11,981	$ (63,883)	$ 264,104

(1) Asset impairment for the year ended December 31, 2019 includes a long-lived asset impairment of $60.2 million related to asset groups recorded within the Met and CAPP - Thermal reporting segments and an asset impairment of $6.2 million primarily related to the write-off of prepaid purchased coal as a result of Blackjewel's Chapter 11 bankruptcy filing on July 1, 2019. Refer to Note 8 for further information.

(2) The goodwill impairment testing as of December 31, 2019 resulted in a goodwill impairment of $124.4 million to write down the full carrying value of goodwill. Refer to Note 2 for further information.
(3) The cost impact of the coal inventory fair value adjustment as a result of the Merger was completed during the three months ended June 30, 2019.
(4) During the year ended December 31, 2019, the Company entered into an exchange transaction which primarily included the release of the PRB overriding royalty interest owed to the Company in exchange for met coal reserves which resulted in a gain of $9.1 million.
(5) Management restructuring costs are related to severance expense associated with senior management changes in the year ended December 31, 2019.

The following table summarizes Adjusted EBITDA for our two reportable segments and All Other category:

	Year Ended December 31,		Increase (Decrease)	
(In thousands)	**2020**	**2019**	**$**	**%**
Adjusted EBITDA				
Met operations	$ 120,281	$ 316,006	$ (195,725)	(61.9)%
CAPP - Thermal operations	9,853	11,981	(2,128)	(17.8)%
All Other	(46,732)	(63,883)	17,151	26.8 %
Total	$ 83,402	$ 264,104	$ (180,702)	(68.4)%

Met operations. Adjusted EBITDA decreased $195.7 million, or 61.9%, for the year ended December 31, 2020 compared to the prior year period. The decrease in Adjusted EBITDA was primarily driven by decreased non-GAAP coal sales realization per ton of $32.66, or 28.8%, due to a weaker pricing environment resulting from the impact of the COVID-19 pandemic.

CAPP - Thermal operations. Adjusted EBITDA decreased $2.1 million, or 17.8%, for the year ended December 31, 2020. The decrease in Adjusted EBITDA was primarily driven by decreased coal sales volumes of 1.8 million tons, or 42.2%, and decreased non-GAAP coal sales realization per ton of $3.79, or 6.4%, due to a weaker pricing and demand environment resulting from the COVID-19 pandemic.

All Other category. Adjusted EBITDA increased $17.2 million, or 26.8%, for the year ended December 31, 2020 compared to the prior year period. The increase in Adjusted EBITDA was primarily driven by decreases in selling, general and administrative expenses and increased gain on sale of assets.

Discontinued Operations

The former PRB and NAPP operations results of operations and financial position are reported as discontinued operations in the Consolidated Financial Statements. Refer to Note 3 for further information on discontinued operations. The following tables summarize certain financial information relating to the PRB and NAPP discontinued operating results which are reported within the All Other reporting segment that have been derived from our consolidated financial statements for the years ended December 31, 2020 and 2019.

(In thousands, except for per ton data)	Year Ended December 31, 2020		2019	
Coal revenues	$	233,083	$	286,073
Less: Freight and handling fulfillment revenues		(11,135)		(8,827)
Non-GAAP Coal revenues	$	221,948	$	277,246
Tons sold		5,420		7,484
Non-GAAP Coal sales realization per ton	$	40.95	$	37.05
Cost of coal sales (exclusive of items shown separately below)	$	215,390	$	256,336
Depreciation, depletion and amortization - production [1]		11,570		99,405
Accretion on asset retirement obligations		4,154		9,894
Amortization of acquired intangibles, net		861		3,101
Total Cost of coal sales	$	231,975	$	368,736
Less: Freight and handling costs		(11,135)		(8,827)
Less: Depreciation, depletion and amortization - production [1]		(11,570)		(99,405)
Less: Accretion on asset retirement obligations		(4,154)		(9,894)
Less: Amortization of acquired intangibles, net		(861)		(3,101)
Less: Idled and closed mine costs		(3,102)		(4,005)
Non-GAAP Cost of coal sales	$	201,153	$	243,504
Tons sold		5,420		7,484
Non-GAAP Cost of coal sales per ton	$	37.11	$	32.54

[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, 2020		2019	
Coal revenues	$	233,083	$	286,073
Less: Total Cost of coal sales (per table above)		(231,975)		(368,736)
GAAP Coal margin	$	1,108	$	(82,663)
Tons sold		5,420		7,484
GAAP Coal margin per ton	$	0.20	$	(11.05)
GAAP Coal margin	$	1,108	$	(82,663)
Add: Depreciation, depletion and amortization - production [1]		11,570		99,405
Add: Accretion on asset retirement obligations		4,154		9,894
Add: Amortization of acquired intangibles, net		861		3,101
Add: Idled and closed mine costs		3,102		4,005
Non-GAAP Coal margin	$	20,795	$	33,742
Tons sold		5,420		7,484
Non-GAAP Coal margin per ton	$	3.84	$	4.51

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

Refer to Note 3 for disclosures on the Cumberland and PRB Back-to-Back Coal Supply Agreements.

Liquidity and Capital Resources

Our primary liquidity and capital resource requirements stem from the cost of our coal production and purchases, our capital expenditures, our debt service, our reclamation obligations, our regulatory costs and settlements and associated costs. Our primary sources of liquidity are derived from sales of coal, our debt financing and miscellaneous revenues.

We believe that cash on hand, cash generated from our operations, and expected tax refunds will be sufficient to meet our working capital requirements, anticipated capital expenditures, debt service requirements, acquisition-related obligations, and reclamation obligations for the next 12 months. 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, contingencies and risks, all of which are difficult to predict and many of which are beyond our control. 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 more quickly if market conditions deteriorate, and we may not be able to do so in a timely fashion, or at all; or one or more of our assumptions prove to be incorrect or if we choose to expand our acquisition, exploration, appraisal, or development efforts or any other activity more rapidly than we presently anticipate. We may decide 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 and Cash Collateral

At December 31, 2020, we had cash and cash equivalents of $139.2 million and no remaining unused capacity under the Amended and Restated Asset-Based Revolving Credit Agreement (the “ABL Facility”). Availability under the ABL Facility is calculated on a monthly basis and fluctuates based on qualifying amounts of coal inventory and trade accounts receivable (the “Borrowing Base”) and the facility's covenant limitations related to our Fixed Charge Coverage Ratio (refer to Analysis of Material Debt Covenants below). In accordance with terms of the ABL Facility, we may be required to cash collateralize the ABL Facility to the extent outstanding borrowings and letters of credit under the ABL Facility exceed the Borrowing Base after considering covenant limitations. Due to fluctuations of the Borrowing Base, we were required to post $25.0 million of cash collateral in January 2021 to remain in compliance with the terms of the ABL Facility as of December 31, 2020. In February 2021, a portion of the posted cash collateral was used to repay the remaining $3.4 million in borrowings under the ABL Facility. In March 2021, the remaining posted cash collateral was returned to unrestricted cash.

To secure our obligations under certain worker’s compensation, black lung, and reclamation obligations and financial guarantees, we are required to provide cash collateral. At December 31, 2020, we had cash collateral in the amounts of $96.0 million, $23.8 million, and $27.2 million classified as long-term restricted cash, long-term restricted investments, and long-term deposits, respectively, on our Consolidated Balance Sheets. 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 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). Additionally, as December 31, 2020, we had $9.3 million of short-term restricted cash held in escrow related to our contingent revenue obligation. Refer to Note 16 for further information regarding the contingent revenue obligation.

Business Updates

With respect to global economic events, there continues to be uncertainty and weakness in the coal industry. On December 14, 2020, S&P Global Ratings affirmed their June 2, 2020 downgrades on their issuer credit ratings on the Company and their issue-level rating on our senior secured debt. On June 2, 2020, S&P Global Ratings downgraded their issuer credit rating on the Company from “B-” to “CCC+” and their issue-level rating on our senior secured debt from “B” to “CCC+” amid weak market indicators. The rating outlook was noted as negative. On April 13, 2020, Moody’s Investors Service downgraded the Company’s Corporate Family Rating to Caa1 from B3, Senior Secured Bank Credit Facility to Caa2 from Caa1, and Probability of Default Rating to Caa1 from B3. The rating outlook was changed from stable to negative. These issues bring 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.

During the second quarter of 2020, as a result of the weakening coal market conditions due in part to the impact of the global COVID-19 pandemic, we announced that we would take certain strategic actions with respect to two of our thermal coal mining complexes in an effort to strengthen our financial performance and improve forecasted liquidity. We announced that an underground mine and preparation plant located in West Virginia would be idled during the third quarter of 2020. In addition, we decided not to move forward with the construction of a new refuse impoundment at our Cumberland mine in Pennsylvania and would therefore no longer spend the significant capital required in connection with the project. On December 10, 2020, we announced the closing of our previously announced agreement to divest our Cumberland mining operations and related property to a third-party purchaser for total consideration of $50.0 million, comprised of approximately $20.0 million in cash and $30.0 million in surety bonding collateral, resulting in a loss on sale of $36.1 million. Refer to Note 3 for additional disclosure information on this transaction, the divestiture of our former PRB operations and the related ESM Transaction, and the related discontinued operations.

Weak market conditions and depressed coal prices have resulted in operating losses in recent quarters. If market conditions do not improve, we expect to continue to experience operating losses and cash outflows in the coming quarters, which would adversely affect our liquidity. In particular, we expect a decrease in cash and cash equivalents to the extent that capital expenditures and other cash obligations, including our debt service obligations, exceed cash generated from our operations.

The COVID-19 pandemic has had negative impacts on our business, results of operations, financial condition, and cash flows. A continued period of reduced demand for our products could have significant adverse consequences on our business. The full extent of the impact of the COVID-19 pandemic on our operational and financial performance will depend on various developments, including the duration and spread of the outbreak, its impact on our customers and suppliers and the range of governmental and community reactions to the pandemic, which are still uncertain and cannot be fully predicted at this time.

We have continued to take steps to enhance our capital structure and financial flexibility and reduce cash outflows from operations in the near term, including reductions in our operating, SG&A, and overhead costs, reductions in production volumes, and the amendment of our credit facility. We expect to engage in similar efforts in the future as opportunities arise through refinancing, repayment or repurchase of outstanding debt, amendment of our credit facilities, and other methods, and may consider the sale of other assets or businesses, and such other measures as 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 facility and indentures.

On March 27, 2020, the CARES Act was enacted into law. As a result of the CARES Act, AMT Credits of $66.1 million were received in the fourth quarter of 2020. As of December 31, 2020, the Company has recorded $64.2 million of current federal income tax receivable and associated interest receivable of $5.2 million related to an NOL carryback claim. Refer to Note 19.

Pension Plans

We sponsor three qualified non-contributory pension plans (“Pension Plans”) which cover certain salaried and non-union hourly employees. 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 these Pension Plans. Annual funding contributions to the Pension Plans 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 expected to contribute $25.5 million to the Pension Plans in 2021 based on our estimates prior to the recent funding relief granted under the American Rescue Plan Act. We now expect these amounts may be reduced, as a result of the relief, and are in the process of quantifying the impact. Refer to Note 20 for further disclosures related to this 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 is 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, is 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. If our appeal is unsuccessful, we may be required to provide additional letters of credit 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 collateral. Either of these outcomes would significantly reduce our liquidity.

Cash Flows

Cash, cash equivalents, and restricted cash decreased by $103.1 million and $129.6 million over the years ended December 31, 2020 and 2019, respectively. The net change in cash, cash equivalents, and restricted cash was attributable to the following:

	Year Ended December 31,	
	2020	2019
Cash flows (in thousands):		
Net cash provided by operating activities	$ 129,236	$ 131,880
Net cash used in investing activities	(209,969)	(191,752)
Net cash used in financing activities	(22,376)	(69,694)
Net decrease in cash and cash equivalents and restricted cash	$ (103,109)	$ (129,566)

Operating Activities

Net cash flows from operating activities consist of a net loss adjusted for non-cash items. Net cash provided by operating activities for the year ended December 31, 2020 was $129.2 million and was primarily attributable to net loss of $446.9 million adjusted for asset impairment and restructuring of $256.5 million, depreciation, depletion and amortization of $151.5 million, deferred income taxes of $33.1 million, loss on sale of business of $36.1 million, accretion on asset retirement obligations of $30.7 million, amortization of debt issuance costs and accretion of debt discount of $14.8 million. The change in our operating assets and liabilities of $34.4 million was primarily attributable to decreases in trade accounts receivable, net, of $91.2 million, decreases in inventories, net, of $48.7 million, and decreases in prepaid expenses and other current assets of $28.2 million, partially offset by decreases in other non-current liabilities of $43.8 million, decreases in acquisition-related obligations of $32.6 million, decreases in trade accounts payable of $28.6 million, and decreases in asset retirement obligations of $19.4 million.

Net cash provided by operating activities for the year ended December 31, 2019 was $131.9 million and was primarily attributable to net loss of $316.3 million adjusted for depreciation, depletion and amortization of $315.2 million, goodwill impairment of $124.4 million, asset impairment of $83.5 million, accretion on asset retirement obligations of $33.8 million, loss on modification and extinguishment of debt of $26.5 million, employee benefit plans, net, of $20.8 million. The change in our operating assets and liabilities of ($172.8) million was primarily attributable to decreases in asset retirement obligations of $111.6 million, increases in inventories, net, of $40.7 million, decreases in other non-current liabilities of $33.6 million, decreases in trade accounts payable of $28.1 million, decreases in acquisition-related obligations of $28.1 million, decreases in accrued expenses and other current liabilities of $25.5 million, and increases in other non-current assets of $24.5 million, partially offset by decreases in prepaid expenses and other current assets of $56.7 million, resulting primarily from income tax refunds of $72.2 million, and decreases in trade accounts receivable, net, of $47.4 million.

Investing Activities

Net cash used in investing activities for the year ended December 31, 2020 was $210.0 million, primarily driven by capital expenditures of $154.0 million, cash paid on sale of business of $52.2 million, and purchases of investment securities of $21.1 million, partially offset by maturity of investment securities of $16.7 million.

Net cash used in investing activities for the year ended December 31, 2019 was $191.8 million, primarily driven by capital expenditures of $192.4 million, purchases of investment securities of $92.9 million, partially offset by maturity of investment securities of $100.3 million.

Financing Activities

Net cash used in financing activities for the year ended December 31, 2020 was $22.4 million, primarily attributable to principal repayments of debt of $59.8 million and principal repayments of notes payable of $16.7 million, partially offset by proceeds from borrowings on debt of $57.5 million.

Net cash used in financing activities for the year ended December 31, 2019 was $69.7 million, primarily attributable to principal repayments of debt of $552.8 million, common stock repurchases and related expenses of $37.6 million, and principal repayments of notes payable of $14.8 million, partially offset by proceeds from borrowings on debt of $544.9 million.

Long-Term Debt

On November 9, 2018, we entered into a $225.0 million ABL Facility under the Amended and Restated Asset-Based Revolving Credit Agreement expiring on April 3, 2022. On June 14, 2019, we entered into a $561.8 million Term Loan Credit Facility under the Credit Agreement. Refer to Note 15 for additional disclosures on long-term debt.

Analysis of Material Debt Covenants

We are in compliance with all covenants under the Credit Agreement and the Amended and Restated Asset-Based Revolving Credit Agreement, as of December 31, 2020. A breach of the covenants in the Credit Agreement and the Amended and Restated Asset-Based Revolving Credit Agreement could result in a default under the terms of the agreement and the respective lenders could elect to declare all amounts borrowed due and payable.

Pursuant to the Amended and Restated Asset-Based Revolving Credit Agreement, during any Liquidity Period (capitalized terms as defined in the Amended and Restated Asset-Based Revolving Credit Agreement), our Fixed Charge Coverage Ratio cannot be less than 1.0 as of the last day of any Test Period, commencing with the Test Period ended immediately preceding the commencement of such Liquidity Period. The Fixed Charge Coverage Ratio is calculated as (a) Consolidated EBITDA of the Company and its Restricted Subsidiaries for such period, minus non-financed Capital Expenditures (including Capital Expenditures financed with the proceeds of any Loans) paid or payable currently in cash by the Company or any of its Subsidiaries for such period to (b) the Fixed Charges of the Company and its Restricted Subsidiaries during such period. As of December 31, 2020, we were not in a Liquidity Period.

Acquisition-Related Obligations

Refer to Note 16 for additional details and disclosures on acquisition-related obligations.

Off-Balance Sheet Arrangements

Refer to Note 23, part (c) for disclosures on off-balance sheet arrangements.

Other

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.

Contractual Obligations

The following is a summary of our significant contractual obligations as of December 31, 2020:

(in thousands)	2021	2022	2023	2024	2025	After 2025	Total
Long-term debt [(1)]	$ 24,993	$ 21,468	$ 8,118	$ 536,519	$ —	$ —	$ 591,098
Other debt [(2)]	3,837	3,347	1,182	109	—	—	8,475
Acquisition-related obligations	8,144	4,247	—	—	—	—	12,391
Contingent revenue obligation [(3)]	11,395	13,209	13,702	—	—	—	38,306
Minimum equipment purchase commitments	5,008	—	170	—	—	—	5,178
Transportation commitments	29	338	—	—	—	—	367
Operating leases	1,210	1,076	1,101	982	897	4,018	9,284
Minimum royalties	15,708	14,525	13,633	11,560	10,815	43,603	109,844
Coal purchase commitments	44,707	—	—	—	—	—	44,707
Total	$ 115,031	$ 58,210	$ 37,906	$ 549,170	$ 11,712	$ 47,621	$ 819,650

(1) Includes Term Loan Credit Facility principal amounts of $5.6 million in 2021, $5.6 million in 2022, $5.6 million in 2023, and $536.5 million in 2024. Cash interest payable on this obligation, with an interest rate of 9.00% as of December 31, 2020, would be approximately $53.4 million in 2021, $55.3 million in 2022, $54.8 million in 2023, and $24.7 million in 2024. Also includes Lexington Coal Company ("LCC") Note Payable principal amounts of $17.5 million in 2021 and $10.0 million in 2022, LCC Water Treatment Stipulation principal amounts of $1.9 million in 2021, $2.5 million in 2022, and $2.5 million in 2023, and the senior secured asset-based revolving credit facility ("ABL Facility") principal amount of $3.4 million in 2022. Refer to Note 15 for principal payment and interest rate terms.
(2) Includes financing lease obligation principal amounts of $2.0 million in 2021, $1.7 million in 2022, $0.3 million in 2023, and $6 thousand in 2024. Cash interest payable on these obligations with interest rates ranging between 2.49% and 27.39%, would be approximately $0.2 million in 2021, $0.1 million in 2022, and $15 thousand in 2023. Other debt includes principal amounts of $1.8 million in 2021, $1.6 million in 2022, $0.9 million in 2023, and $0.1 million in 2024.
(3) Refer to Note 16 for further disclosures related to this obligation.

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

(in thousands)	2021	2022	2023	2024	2025	After 2025	Total
Asset retirement obligation	$ 25,490	$ 34,180	$ 28,330	$ 35,725	$ 42,622	$ 330,075	$ 496,422
Pension benefit obligation [(1)]	31,178	31,267	31,628	32,149	32,426	981,075	1,139,723
Black lung benefit obligation	6,810	6,929	7,038	7,112	7,244	177,472	212,605
Life insurance benefit obligation	628	588	586	586	587	14,909	17,884
Workers' compensation benefit obligation	13,155	9,351	7,185	6,106	5,633	80,382	121,812
Total	$ 77,261	$ 82,315	$ 74,767	$ 81,678	$ 88,512	$ 1,583,913	$ 1,988,446

(1) The estimated undiscounted cash flows will be paid from the defined benefit pension plan assets held within the defined benefit pension plan trust. Refer to Note 20 for further disclosures related to this obligation.

We expect to spend between $75 million and $95 million on capital expenditures during 2021.

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.

Business Combinations. We account for our business combinations under the acquisition method of accounting. The total cost of acquisitions is allocated to the underlying identifiable net tangible and intangible assets based on their respective estimated fair values. Determining the fair value of assets acquired and liabilities assumed requires management's judgment, the utilization of independent valuation experts, and often involves the use of significant estimates and assumptions with respect to the timing and amounts of future cash inflows and outflows, discount rates, market prices and asset lives, among other items.

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 within 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, 2020, we had recorded asset retirement obligation liabilities of $165.1 million, including amounts reported as current. While the precise amount of these future costs cannot be determined with certainty, as of December 31, 2020, we estimate that the aggregate undiscounted cost of final mine closures is approximately $496.4 million.

Retirement Plans. We have three non-contributory defined benefit retirement plans (the "Pension Plans") covering certain of our salaried and non-union hourly employees, all of which are frozen. 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 Plans is in accordance with requirements of ERISA, and our contributions can be deducted for federal income tax purposes. We contributed $22.7 million to our Pension Plans for the year ended December 31, 2020. For the year ended December 31, 2020, we recorded a net periodic benefit credit of $4.7 million, which included a settlement of $1.6 million, for our Pension Plans and have recorded net obligations of $218.7 million.

The calculation of the net periodic benefit expense (credit) and projected benefit obligation associated with our Pension Plans requires the use of a number of assumptions, which are used by our independent actuaries to make the underlying calculations. 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 at the beginning of each fiscal year based upon historical returns and projected returns on the underlying mix of invested assets. The Pension Plans investment targets are 60% equity securities and 40% fixed income funds. Investments are rebalanced on a periodic basis to stay within these targeted guidelines. The long-term rate of return assumption used to determine net periodic benefit expense was 5.90% for the year ended December 31, 2020. The long-term rate of return assumption to be used in 2021 is expected to be 5.80%. 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 pension expense was 2.92% for the year ended December 31, 2020. The differences resulting from actual versus assumed discount rates are amortized into pension 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, 2020 by approximately $3.8 million and decrease the projected benefit obligation as of December 31, 2020 by approximately $90.9 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, 2020 by approximately $5.2 million and increase the projected benefit obligation as of December 31, 2020 by approximately $113.9 million.

Coal Workers' Pneumoconiosis. We are required by federal and state statues to provide benefits to employees for awards related to coal workers' pneumoconiosis disease (black lung). Certain of our 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 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 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. Refer to Note 20 to the Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K for the weighted-average rate assumptions related to black lung obligations used to determine the benefit obligation. 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, 2020, we had estimated black lung obligations of approximately $124.8 million, including amounts reported as current and within discontinued operations, which are net of assets of $2.7 million that are held in a tax-exempt trust fund.

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, 2020, a valuation allowance of $263.4 million has been provided on federal and state net operating losses and other deferred tax assets not expected to provide future tax benefits.

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 performed long-lived asset impairment tests as of November 30, 2020, August 31, 2020, May 31, 2020, and February 29, 2020. In total, we determined that indicators of impairment with respect to five long-lived asset groups within our Met reporting segment, three long-lived asset groups within its CAPP - Thermal reporting segment, and one long-lived asset group within discontinued operations existed during the year ended December 31, 2020. At December 31, 2020, we determined that the carrying amounts of the asset groups exceeded both their undiscounted cash flows and their estimated fair values. As a result, the Company recorded a long-lived asset impairment of $228.6 million, including $147.6 million recorded within discontinued operations.

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 and Note 8 to the Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K.

Goodwill. Goodwill represents the excess of purchase price over the fair value of the identifiable net assets of acquired companies. 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. Refer to Note 2 to the Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K.

Prior to performing a quantitative goodwill impairment test, the Company first has the option of performing a qualitative assessment of goodwill. If the Company determines based on its qualitative assessment that more likely than not that the fair value of a reporting unit containing goodwill exceeds its carrying amount, no further impairment testing is required. If a quantitative impairment test is required, the Company compares the fair value of a reporting unit including goodwill to its carrying value. 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 value of goodwill.

The valuation methodology utilized to estimate the fair value of the reporting units is based on both a market and income approach and is within the range of fair values yielded under each approach. The income approach is based on a discounted cash flow methodology based on estimates of future sales volumes, coal prices, production costs, and a risk-adjusted cost of capital. The market approach is based on a guideline company and similar transaction methodology. Under the guideline company approach, certain metrics from a selected group of publicly traded guideline companies that have similar operations to the Company’s reporting units are used to estimate the fair value of the reporting units. Under the similar transactions approach, recent merger and acquisition transactions for companies that have similar operations to the Company’s reporting units are used to estimate the fair value of the Company’s reporting units.

The income approach is dependent upon a number of significant management estimates about future performance. Changes in any of these assumptions could materially impact the estimated fair value of our reporting units. Our forecasts of coal prices generally reflect a long-term outlook of market prices expected to be received for our coal. However, coal prices are influenced by global market conditions beyond our control. If actual coal prices are less than our expectations, it could have a material impact on the fair value of our reporting units. Our forecasts of costs to produce coal are based on our operating forecasts and an assumed inflation rate for materials and supplies such as steel, diesel fuel and explosives. However, the costs of the materials and supplies used in our production process such as steel, diesel fuel and explosives are influenced by global market conditions beyond our control. If actual costs are higher or if inflation increases above our expectations, it could have a material impact on the fair value of our reporting units. We also are faced with increasingly stringent safety standards and governmental regulation, much of which is beyond our control, which could increase our costs and materially decrease the fair value of our reporting units. For a further discussion of the factors that could result in a change in our assumptions, see “Risk Factors” in this Annual Report on Form 10-K and our other filings with the Securities and Exchange Commission.

As of December 31, 2019, our goodwill balance was fully impaired. Refer to Note 2 to the Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K.

Contingent Revenue Obligation. Our contingent revenue obligation was assumed in connection with the Merger. Determining the fair value of this obligation requires management’s judgment and the utilization of independent valuation experts, and involves the use of significant estimates and assumptions with respect to forecasts of future revenues and discount rates. The Company forecasts future revenues for the duration of the obligation for the properties subject to the obligation. Discount rates are determined based on the risk associated with the projected cash flows. If our assumptions do not materialize as expected, actual payments made under the obligation could differ materially from our current estimates. For a further discussion of the factors that could result in a change in our assumptions, see “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 for disclosures related to new accounting policies adopted.

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.

Opinion on the Financial Statements
We have audited the accompanying consolidated balance sheet of Alpha Metallurgical Resources, Inc. and subsidiaries (the Company) as of December 31, 2020, the related consolidated statements of operations, comprehensive loss, stockholders' equity and cash flows for the year then ended, and the related notes (collectively, the financial statements). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020, and the results of its operations and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion
These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audit. 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audit 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 audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

Critical Audit Matter
The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters 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.

As described in Notes 2 and 17 to the consolidated financial statements, the Company's consolidated asset retirement obligation liability was $165.1 million at December 31, 2020. 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. The Company annually reviews its estimated future cash flows for its asset retirement obligations.

We identified the valuation of the asset retirement obligation 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 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 estimate, assessing consistency between timing of reclamation activities and projected mine life, evaluated the appropriateness of the estimated costs based on mine type, and compared anticipated costs to recent operating data.
- We utilized an external specialist to perform observations of mine site operations, conducted interviews of engineering personnel, assessed the completeness of the mine reclamation estimate with respect to meeting 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
March 15, 2021

Report of Independent Registered Public Accounting Firm

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

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheet of Alpha Metallurgical Resources, Inc. (formerly Contura Energy, Inc.) and subsidiaries (the Company) as of December 31, 2019, the related consolidated statements of operations, comprehensive loss, cash flows, and stockholders' equity for the year then ended, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019, and the results of its operations and its cash flows for the year then ended, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit. 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 the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

/s/ *KPMG LLP*

We served as the Company's auditor from 2016 to 2020.

Richmond, Virginia
March 18, 2020, except for the seventh paragraph in Note 1 and Note 3, as to which the date is March 15, 2021

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

	Year Ended December 31,	
	2020	2019
Revenues:		
Coal revenues	$ 1,413,124	$ 1,995,934
Other revenues	3,063	5,346
Total revenues	1,416,187	2,001,280
Costs and expenses:		
Cost of coal sales (exclusive of items shown separately below)	1,281,011	1,667,768
Depreciation, depletion and amortization	139,885	215,757
Accretion on asset retirement obligations	26,504	23,865
Amortization of acquired intangibles, net	9,214	(3,189)
Selling, general and administrative expenses (exclusive of depreciation, depletion and amortization shown separately above)	57,356	78,953
Merger-related costs	—	1,090
Asset impairment and restructuring	83,878	66,324
Goodwill impairment	—	124,353
Total other operating income:		
Mark-to-market adjustment for acquisition-related obligations	(8,750)	(3,564)
Other income	(2,223)	(974)
Total costs and expenses	1,586,875	2,170,383
Loss from operations	(170,688)	(169,103)
Other (expense) income:		
Interest expense	(74,528)	(67,521)
Interest income	7,027	7,247
Loss on modification and extinguishment of debt	—	(26,459)
Equity loss in affiliates	(3,473)	(6,874)
Miscellaneous loss, net	(1,972)	(10,195)
Total other expense, net	(72,946)	(103,802)
Loss from continuing operations before income taxes	(243,634)	(272,905)
Income tax benefit	2,164	53,287
Net loss from continuing operations	(241,470)	(219,618)
Discontinued operations:		
Loss from discontinued operations before income taxes	(205,429)	(105,185)
Income tax benefit from discontinued operations	—	8,484
Loss from discontinued operations	(205,429)	(96,701)
Net loss	$ (446,899)	$ (316,319)
Basic loss per common share:		
Loss from continuing operations	$ (13.20)	$ (11.68)
Loss from discontinued operations	(11.22)	(5.14)
Net loss	$ (24.42)	$ (16.82)
Diluted loss per common share:		
Loss from continuing operations	$ (13.20)	$ (11.68)
Loss from discontinued operations	(11.22)	(5.14)

Net loss	$	(24.42)	$	(16.82)
Weighted average shares - basic		18,298,362		18,808,460
Weighted average shares - diluted		18,298,362		18,808,460

Refer to accompanying Notes to Consolidated Financial Statements.

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

	Year Ended December 31,	
	2020	**2019**
Net loss	$ (446,899)	$ (316,319)
Other comprehensive loss, net of tax:		
Employee benefit plans:		
Current period actuarial loss	$ (60,647)	$ (42,891)
Income tax	—	—
	$ (60,647)	$ (42,891)
Less: reclassification adjustments for amounts reclassified to earnings due to amortization of net actuarial loss and settlements	7,278	7,405
Income tax	—	—
	$ 7,278	$ 7,405
Total other comprehensive loss, net of tax	$ (53,369)	$ (35,486)
Total comprehensive loss	$ (500,268)	$ (351,805)

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)

	December 31, 2020	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	$ 139,227	$ 212,803
Trade accounts receivable, net of allowance for doubtful accounts of $293 and $0 as of December 31, 2020 and 2019	145,670	224,173
Inventories, net	108,051	150,888
Prepaid expenses and other current assets	106,252	77,723
Current assets - discontinued operations	10,935	45,892
Total current assets	510,135	711,479
Property, plant, and equipment, net of accumulated depreciation and amortization of $382,423 and $256,378 as of December 31, 2020 and 2019	363,620	436,398
Owned and leased mineral rights, net of accumulated depletion and amortization of $35,143 and $27,548 as of December 31, 2020 and 2019	463,250	523,012
Other acquired intangibles, net of accumulated amortization of $25,700 and $26,806 as of December 31, 2020 and 2019	88,196	124,246
Long-term restricted cash	96,033	122,524
Deferred income taxes	—	33,065
Other non-current assets	149,382	189,475
Non-current assets - discontinued operations	9,473	162,624
Total assets	$ 1,680,089	$ 2,302,823
Liabilities and Stockholders’ Equity		
Current liabilities:		
Current portion of long-term debt	$ 28,830	$ 28,476
Trade accounts payable	58,413	82,725
Acquisition-related obligations - current	19,099	33,639
Accrued expenses and other current liabilities	140,406	139,479
Current liabilities - discontinued operations	12,306	30,833
Total current liabilities	259,054	315,152
Long-term debt	553,697	564,458
Acquisition-related obligations - long-term	20,768	46,259
Workers’ compensation and black lung obligations	230,081	228,850
Pension obligations	218,671	204,086
Asset retirement obligations	140,074	164,406
Deferred income taxes	480	422
Other non-current liabilities	28,072	26,822
Non-current liabilities - discontinued operations	29,090	56,246
Total liabilities	1,479,987	1,606,701
Commitments and Contingencies (Note 23)		
Stockholders’ Equity		
Preferred stock - par value $0.01, 5.0 million shares authorized, none issued	—	—
Common stock - par value $0.01, 50.0 million shares authorized, 20.6 million issued and 18.3 million outstanding at December 31, 2020 and 20.5 million issued and 18.2 million outstanding at December 31, 2019	206	205
Additional paid-in capital	779,424	775,707
Accumulated other comprehensive loss	(111,985)	(58,616)

Treasury stock, at cost: 2.3 million shares at December 31, 2020 and 2019	(107,014)	(107,984)
(Accumulated deficit) retained earnings	(360,529)	86,810
Total stockholders’ equity	200,102	696,122
Total liabilities and stockholders’ equity	$ 1,680,089	$ 2,302,823

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,	
	2020	**2019**
Operating activities:		
Net loss	$ (446,899)	$ (316,319)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation, depletion and amortization	151,455	315,162
Amortization of acquired intangibles, net	10,075	(88)
Accretion of acquisition-related obligations discount	3,342	5,522
Amortization of debt issuance costs and accretion of debt discount	14,772	14,070
Mark-to-market adjustment for acquisition-related obligations	(8,750)	(3,564)
Loss on sale of business	36,113	—
(Gain) loss on disposal of assets	(2,401)	8,142
Gain on assets acquired in an exchange transaction	—	(9,083)
Accretion on asset retirement obligations	30,658	33,759
Employee benefit plans, net	14,439	20,846
Deferred income taxes	33,123	(12,098)
Goodwill impairment	—	124,353
Asset impairment and restructuring	256,518	83,485
Loss on modification and extinguishment of debt	—	26,459
Stock-based compensation	4,896	12,397
Equity in loss of affiliates	3,473	6,874
Other, net	(5,972)	(5,204)
Changes in operating assets and liabilities		
Trade accounts receivable, net	91,190	47,424
Inventories, net	48,689	(40,694)
Prepaid expenses and other current assets	28,152	56,671
Deposits	(17,926)	15,170
Other non-current assets	(6,753)	(24,460)
Trade accounts payable	(28,620)	(28,148)
Accrued expenses and other current liabilities	15,428	(25,495)
Acquisition-related obligations	(32,560)	(28,128)
Asset retirement obligations	(19,375)	(111,616)
Other non-current liabilities	(43,831)	(33,557)
Net cash provided by operating activities	129,236	131,880
Investing activities:		
Capital expenditures	(153,990)	(192,411)
Proceeds on disposal of assets	4,023	2,780
Cash paid on sale of business	(52,192)	—
Capital contributions to equity affiliates	(3,443)	(10,051)
Purchase of investment securities	(21,129)	(92,855)
Maturity of investment securities	16,685	100,250
Other, net	77	535
Net cash used in investing activities	(209,969)	(191,752)
Financing activities:		
Proceeds from borrowings on debt	57,500	544,946
Principal repayments of debt	(59,768)	(552,809)

Principal repayments of financing lease obligations	(3,176)	(3,654)
Debt issuance costs	—	(6,689)
Common stock repurchases and related expenses	(209)	(37,622)
Principal repayments of notes payable	(16,723)	(14,818)
Other, net	—	952
Net cash used in financing activities	(22,376)	(69,694)
Net decrease in cash and cash equivalents and restricted cash	(103,109)	(129,566)
Cash and cash equivalents and restricted cash at beginning of period	347,680	477,246
Cash and cash equivalents and restricted cash at end of period	$ 244,571	$ 347,680
Supplemental cash flow information:		
Cash paid for interest	$ 49,294	$ 51,877
Cash paid for income taxes	$ 5	$ 3,039
Cash received for income tax refunds	$ 68,801	$ 72,236
Supplemental disclosure of noncash investing and financing activities:		
Financing leases and capital financing - equipment	$ 4,411	$ 5,324
Accrued capital expenditures	$ 7,493	$ 4,110

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,	
	2020	**2019**
Cash and cash equivalents	$ 139,227	$ 212,793
Short-term restricted cash (included in Prepaid expenses and other current assets)	9,311	12,363
Long-term restricted cash	96,033	122,524
Total cash and cash equivalents and restricted cash shown in the Consolidated Statements of Cash Flows	$ 244,571	$ 347,680

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	Treasury Stock at Cost	Retained Earnings (Accumulated Deficit)	Total Stockholders' Equity
Balances, December 31, 2018	$ 202	$ 761,301	$ (23,130)	$ (70,362)	$ 403,129	1,071,140
Net loss	—	—	—	—	(316,319)	(316,319)
Other comprehensive loss, net	—	—	(35,486)	—	—	(35,486)
Stock-based compensation and net issuance of common stock for share vesting	1	13,455	—	—	—	13,456
Exercise of stock options	2	932	—	—	—	934
Common stock repurchases and related expenses	—	—	—	(37,622)	—	(37,622)
Warrant exercises	—	19	—	—	—	19
Balances, December 31, 2019	$ 205	$ 775,707	$ (58,616)	$ (107,984)	$ 86,810	$ 696,122
Net loss	—	—	—	—	(446,899)	(446,899)
Credit losses cumulative-effect adjustment	—	—	—	—	(440)	(440)
Other comprehensive loss, net	—	—	(53,369)	—	—	(53,369)
Stock-based compensation and net issuance of common stock for share vesting	1	3,717	—	—	—	3,718
Common stock repurchases and related expenses	—	—	—	970	—	970
Balances, December 31, 2020	$ 206	$ 779,424	$ (111,985)	$ (107,014)	$ (360,529)	$ 200,102

Refer to accompanying Notes to Consolidated Financial Statements.

(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 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 balance sheet and consolidated statements of operations, comprehensive loss, cash flows and stockholders' equity for the Company are referred to as the "Financial Statements." The Financial Statements are also referred to as "Consolidated" and references across periods are generally labeled "Balance Sheets," "Statements of Operations," and "Statements of Cash Flows."

The Consolidated Financial Statements include all wholly owned subsidiaries' results of operations for the years ended December 31, 2020 and 2019. All significant intercompany transactions have been eliminated in consolidation.

On December 10, 2020, the Company closed on a transaction with Iron Senergy Holdings, LLC, to sell its thermal coal mining operations located in Pennsylvania consisting primarily of our Cumberland mining complex and related property (the Company's former Northern Appalachia ("NAPP") operations). On December 8, 2017, the Company closed a transaction with Blackjewel L.L.C. to sell the Eagle Butte and Belle Ayr mines located in the Powder River Basin ("PRB"), Wyoming, along with related coal reserves, equipment, infrastructure and other real properties. Refer to Note 3 for information related to Blackjewel L.L.C.'s subsequent bankruptcy filing and the related ESM transaction. The Company's former NAPP and PRB operations results of operations and financial position are reported as discontinued operations in the Consolidated Financial Statements. The historical information in the accompanying Notes 2, 3, 4, 6, 7, 9, 10, 11, 12, 14, 15, 17, 18, 19, 20, 23, 24, and 25 to the Consolidated Financial Statements has been restated to reflect the effects of the former NAPP and PRB operations being reported as discontinued operations in the Consolidated Financial Statements. Refer to Note 3 for further information on discontinued operations.

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

Liquidity Risks and Uncertainties

Weak market conditions and depressed coal prices have resulted in operating losses. If market conditions do not improve, the Company may experience continued operating losses and cash outflows in the coming quarters, which would adversely affect its liquidity. The Company may need to raise additional funds more quickly if market conditions deteriorate and may not be able to do so in a timely fashion, or at all. The Company believes it will have sufficient liquidity to meet its working capital requirements, anticipated capital expenditures, debt service requirements, acquisition-related obligations, and reclamation obligations for the 12 months subsequent to the issuance of these financial statements. The Company relies on a number of assumptions in budgeting for future activities. These include the costs for mine development to sustain capacity of its operating mines, 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, contingencies and risks, all of which are difficult to predict and many of which are beyond the Company's control. Therefore, the cash on hand and from future operations will be subject to any significant changes in these assumptions.

COVID-19 Pandemic

In the first quarter of 2020, the COVID-19 virus was declared a pandemic by the World Health Organization. The COVID-19 pandemic has had negative impacts on the Company's business, results of operations, financial condition and cash flows. A continued period of reduced demand for the Company's products could have significant adverse consequences. The full extent of the impact of the COVID-19 pandemic on the Company's operational and financial performance will depend on certain developments, including the duration and spread of the outbreak, its impact on its customers and suppliers and the range of governmental and community reactions to the pandemic, which are still uncertain and cannot be fully predicted at this time.

As further described in Note 15, on March 20, 2020, the Company borrowed funds under a senior secured asset-based revolving credit facility. The funds were borrowed to augment the Company's short-term operational flexibility in the face of uncertainty created by the current spread of the COVID-19 virus and its potential effects. In the first quarter of 2021, the Company repaid the remaining $3,350 of borrowed funds as of December 31, 2020.

In response to the COVID-19 pandemic, on March 27, 2020, the "Coronavirus Aid, Relief, and Economic Security Act" ("CARES Act") was enacted into law. As a result, the Company received $66,130 of accelerated refunds of previously generated alternative minimum tax ("AMT") credits from the Internal Revenue Service ("IRS") during the fourth quarter of 2020 as further described in Note 19 and deferred 2020 employer payroll taxes incurred after the date of enactment of $15,109, including discontinued operations, with two future payments of $7,554 each due by December 31, 2021 and 2022.

On April 3, 2020, the Company announced temporary operational changes in response to market conditions, existing coal inventory levels, and customer deferrals due to concern around the global economic impact of the COVID-19 pandemic. Beginning April 3, 2020, the majority of the Company's operations were idled for a period of approximately 30 days, with some sites idling for shorter periods of time and a few continuing to operate at a near-normal rate of production. Location-specific schedules were implemented based on existing customer agreements, current inventory levels, and anticipated customer demand. Certain preparation plants, docks, and loadouts continued to operate to support business needs and customer shipments. As of May 4, 2020, all Company sites were back to nearly normal staffing levels and operating capacity with additional precautions in place to help reduce the risk of exposure to COVID-19. Refer to Note 8 for discussion of certain strategic actions announced during the second quarter of 2020 with respect to two thermal coal mining complexes in an effort to strengthen the Company's financial performance. The Company will continue to evaluate market conditions amid the continuing uncertainty of the COVID-19 pandemic and expects to adjust its operations accordingly.

(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; asset impairments; goodwill impairment; 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 refundable and receivable; reserves for contingencies and litigation; fair value of financial instruments; and fair value adjustments for acquisition accounting. 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 with original maturities of three months or less. Cash and cash equivalents are stated at cost, which approximates fair value. As of December 31, 2020 and December 31, 2019, the Company's cash equivalents of $139,227 and $212,803, respectively, consisted of highly-rated money market funds.

Restricted Cash

Amounts included in restricted cash represent cash deposits that are restricted as to withdrawal as required by certain agreements entered into by the Company and provide collateral in the amounts of $69,725, $8,445, and $17,863 as of December 31, 2020 to secure workers' compensation and black lung obligations, reclamation-related obligations, and financial payments and other performance obligations, respectively, which have been written on the Company's behalf. As of December 31, 2019, collateral was provided in the amounts of $51,650, $67,868, and $3,006 to secure workers' compensation and black lung obligations, reclamation-related obligations, and financial payments and other performance obligations, respectively, which have been written on the Company's behalf. The Company's restricted cash is primarily invested in interest-bearing accounts. This restricted cash is classified as long-term on the Company's Consolidated Balance Sheets. Additionally, as of December 31, 2020 and 2019, the Company had $9,311 and $12,363, respectively, of short-term restricted cash held in escrow related to the Company's contingent revenue payment obligation. Refer to Note 16 for further information regarding the contingent payment revenue obligation.

Restricted Investments

Restricted investments consist of Federal Deposit Insurance Company ("FDIC") insured certificates of deposit, mutual funds, and U.S. treasury bills classified as either trading securities or held-to-maturity securities. Trading securities are recorded initially at cost and are adjusted to fair value at each reporting period with unrealized gains and recorded in current period earnings or loss. Held-to-maturity securities are recorded at amortized cost with interest income recorded in current period earnings. As of December 31, 2020, $22,498 and $1,270 were classified as trading and held-to-maturity securities, respectively. As of December 31, 2019, $11,021 and $8,378 were classified as trading and held-to-maturity securities, respectively. Given the nature of the underlying investments, the Company does not expect any credit losses and has not recorded any credit losses with respect to its held-to-maturity portfolio.

Restricted investments are restricted as to withdrawal by certain agreements and provide collateral in the amounts of $51, $22,233, and $1,484 as of December 31, 2020 to secure workers' compensation obligations, reclamation-related obligations, and financial payments and other performance obligations, respectively. As of December 31, 2019, collateral was provided in the amounts of $613 and $18,786 to secure workers' compensation obligations and reclamation-related obligations, respectively. These restricted investments are classified as long-term on the Company's Consolidated Balance Sheets.

Deposits

Deposits represent cash deposits held at third parties as required by certain agreements entered into by the Company to provide cash collateral. The Company had cash collateral in the form of deposits in the amounts of $25,633, $1,596, and $1,018 as of December 31, 2020 to secure reclamation-related obligations, financial payments and other performance obligations, and various other operating agreements, respectively. The Company had cash collateral in the form of deposits in the amounts of $8,887 and $1,423 as of December 31, 2019 to secure the Company's obligations under reclamation-related obligations and various other operating agreements, respectively. These deposits are classified as both short-term and long-term on the Company's Consolidated Balance Sheets.

Trade Accounts Receivable and Allowance for Doubtful Accounts

Trade accounts receivable are recorded at their invoiced amounts and do not bear interest. The Company markets its coal primarily to domestic and international 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, 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 24 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.

Discontinued Operations

In accordance with Accounting Standards Codification (“ASC”) 205-20-45, the Company treats a disposal transaction as a discontinued operation when the disposal of a component or group of components represents a strategic shift that will have a major effect on the Company’s operations and financial results. In the period in which the discontinued operations criteria are met, the assets and liabilities of the discontinued operations are separately presented on the Company's Consolidated Balance Sheets and the results of operations, including any gain or loss recognized, is reclassified to discontinued operations on the Company’s Consolidated Statement of Operations. Refer to Note 3 for further information on discontinued operations.

Deferred Longwall Move Expenses

The Company deferred the direct costs, including labor and supplies, associated with moving longwall equipment, the related equipment refurbishment costs, costs to drill vent holes and plug existing gas wells in advance of the longwall panel associated with its former NAPP operations included in discontinued operations of the Consolidated Balance Sheets as of December 31, 2020 and 2019. Refer to Note 3. These deferred costs were amortized on a units-of-production basis into cost of coal sales over the life of the related panel of coal mined by the longwall equipment.

Advanced Mining Royalties

Lease rights to coal reserves are often acquired in exchange for royalty payments. Advance mining royalties are advance payments made to lessors under terms of mineral lease agreements that are recoupable against future production royalties. These advance payments are deferred and charged to operations as the coal reserves are mined. The Company regularly reviews recoverability of advance mining royalties and establishes or adjusts the allowance for advance mining royalties as necessary using the specific identification method. Advance royalty balances are generally charged off against the allowance when they are no longer recoupable.

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. 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. Refer to Note 10 for further detail on property, plant and equipment, net.

(Amounts in thousands except share and per share data)

Owned and Leased Mineral Rights

Owned and leased mineral rights, net of accumulated depletion, for the years ended December 31, 2020 and 2019 were $463,250 and $523,012, respectively, and are reported in assets in the Company’s Consolidated Balance Sheets. These amounts include $10,491 and $36,723 of asset retirement obligation assets, net of accumulated depletion, associated with active mining operations for the years ended December 31, 2020 and 2019, respectively. During the year ended December 31, 2020 and 2019, the Company recorded a long-lived asset impairment which reduced the carrying value of owned and leased mineral rights, net, by $41,579 and $35,445, respectively. Refer to the asset impairment disclosure included in Note 8.

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 on the accompanying Consolidated Statements of Operations and was ($13,746) and $14,551 for the years ended December 31, 2020 and 2019, respectively.

Depletion expense for the years ended December 31, 2020 and 2019 includes a credit of ($34,377) and ($7,162), respectively, related to revisions to asset retirement obligations. Refer to Note 17 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 balance sheet 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 group 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 balance sheet 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.

Refer to Note 12 for disclosures related to leases and the Recently Adopted Accounting Guidance section below for further detail related to the initial adoption of the leases accounting standards.

Acquired Intangibles

The Company has recognized assets for acquired above market-priced coal supply agreements and acquired mine permits and liabilities for acquired below market-priced coal supply agreements. The coal supply agreements were valued based on the present value of the difference between the expected net contractual cash flows based on the stated contract terms, and the estimated net contractual cash flows derived from applying forward market prices at the Merger or acquisition date for new contracts of similar terms and conditions. The acquired mine permits were valued based on the replacement cost and lost profits method as of the Merger date. The balances and respective balance sheet classifications of such assets and liabilities as of December 31, 2020 and 2019, net of accumulated amortization, are set forth in the following tables:

	December 31, 2020		
	Assets [1]	Liabilities [2]	Net Total
Coal supply agreements, net	$ —	$ (327)	$ (327)
Acquired mine permits, net	88,196	—	88,196
Total	$ 88,196	$ (327)	$ 87,869

(Amounts in thousands except share and per share data)

	December 31, 2019		
	Assets [1]	Liabilities [2]	Net Total
Coal supply agreements, net	$ 18	$ (6,018)	$ (6,000)
Acquired mine permits, net	124,228	—	124,228
Total	$ 124,246	$ (6,018)	$ 118,228

[1] Included within other acquired intangibles, net of accumulated amortization, on the Company's Consolidated Balance Sheets.
[2] Included within other non-current liabilities on the Company's Consolidated Balance Sheets.

During the years ended December 31, 2020 and 2019, the Company recorded long-lived asset impairments which reduced the carrying value of acquired mine permits, net, by $21,144 and $5,997. Refer to Note 8 for further information.

The acquired mine permits are amortized over the estimated life of the associated mine. The coal supply agreement assets and liabilities are amortized over the actual number of tons shipped over the life of each contract. The following table details the amortization of mine permits acquired as a result of the Merger and the amortization of above-market and below-market coal supply agreements.

	December 31,	
	2020	2019
Amortization of mine permits [1]	$ 14,887	$ 23,921
Amortization of above-market coal supply agreements	$ 18	$ 783
Amortization of below-market coal supply agreements	(5,691)	(27,893)
Net income [1]	$ (5,673)	$ (27,110)

[1] Included within amortization of acquired intangibles, net in the Consolidated Statements of Operations.

Future net amortization expense related to acquired intangibles is expected to be as follows:

2021	$ 9,712
2022	10,039
2023	10,028
2024	8,677
2025	8,672
Thereafter	40,741
Total net future amortization expense	$ 87,869

Goodwill

Goodwill represents the excess of the purchase price over the fair value of the net identifiable tangible and intangible assets of acquired companies. In connection with the Merger in 2018, the Company recorded goodwill of $124,353 and allocated it to the 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 performed an interim goodwill impairment test as of August 31, 2019 due to a decline in the Company's market capitalization to amounts below book value combined with a decline in global metallurgical coal pricing which indicated that the fair value of the Met segment reporting unit may have been below its carrying value. Following the quantitative testing, the Company concluded that the fair value of the reporting unit exceeded its carrying value and no amount of goodwill was impaired. As of October 31, 2019, the Company performed its annual goodwill impairment test and concluded that more likely than not the fair value of its Met reporting unit to which the Company's goodwill is allocated exceeded its carrying value. As a result, no amount of goodwill was considered impaired as a result of impairment testing at October 31, 2019.

(Amounts in thousands except share and per share data)

However, due to the continued weakening in coal market pricing combined with a significant market price decline for the Company's stock late in the fourth quarter of 2019, the Company performed an interim goodwill impairment test as of December 31, 2019. Following the quantitative testing, the Company concluded that the carrying value of the Met reporting unit exceeded its fair value and recorded a goodwill impairment of $124,353 to write down the full carrying amount of goodwill.

The Company early adopted Accounting Standards Update ("ASU") 2017-04 for the period ended December 31, 2017, which eliminated Step 2 of the quantitative goodwill impairment test. The Company first 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.

The valuation methodology utilized to estimate the fair value of the reporting units is based on both a market and income approach and is within the range of fair values yielded under each approach. The income approach is based on a discounted cash flow methodology 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 market approach is based on a guideline company and similar transaction methodology. Under the guideline company approach, certain metrics from a selected group of publicly traded guideline companies that have similar operations to the Company's reporting units are used to estimate the fair value of the reporting units. Under the similar transactions approach, recent merger and acquisition transactions for companies that have similar operations to the Company's reporting units are used to estimate the fair value of the Company's reporting units.

The following table summarizes the changes in goodwill for the year ended December 31, 2019:

	Balance as of December 31, 2018	Measurement-Period Adjustments [2]	Impairments	Balance as of December 31, 2019
Goodwill [1]	$ 95,624	$ 28,729	$ (124,353)	$ —

[1] There was no goodwill activity during the year ended December 31, 2020.
[2] Prior to the finalization of the Merger purchase price allocation, the Company recorded measurement-period adjustments to the provisional opening balance sheet primarily to property, plant, and equipment, owned and leased mineral rights, asset retirement obligations, and certain actuarial liabilities.

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. Refer to Note 8.

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 to the extent there is a difference between the liability and the amount of cash paid, a gain or loss upon settlement is recorded. The Company annually reviews its estimated future cash flows for its asset retirement obligations. Refer to Note 17 for further disclosures related to asset retirement obligations.

During the year ended December 31, 2019, the Company recorded a long-lived asset impairment which reduced the carrying value of long-lived assets related to asset retirement obligations by $1,671. Refer to the asset impairment disclosure included in Note 8.

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 basis of recorded assets and liabilities. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that some portion or all of the deferred tax asset 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 taxable temporary differences, 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 that 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 19 for further disclosures related to income taxes.

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 Sheet 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 4 for further disclosures related to revenue.

Workers' Compensation and Pneumoconiosis (Black Lung) Benefits

Workers' Compensation

As of December 31, 2020, 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 accrued expenses and other current liabilities and workers' compensation and black lung obligations, respectively, with an offsetting insurance receivable within prepaid expenses and other current assets and other non-current assets. As of December 31, 2020 and 2019, the workers' compensation liability was net of a discount of $24,061 and $24,680, respectively, related to fair value adjustments associated with acquisition accounting. Refer to Note 20 for further disclosures related to workers' compensation.

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, 2020, 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 balance sheet the amount of the Company's unfunded Accumulated Benefit Obligation ("ABO") at the end of the year. Amounts recognized in accumulated other comprehensive income (loss) are adjusted out of accumulated other comprehensive income (loss) when they are subsequently recognized as components of net periodic benefit cost. 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 20 for further disclosures related to black lung benefits.

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 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 20 for further disclosures related to pension.

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 Sheet as accrued expenses and other current liabilities and other non-current liabilities. Refer to Note 20 for further disclosures related to postretirement life insurance benefits.

Net (Loss) Income per Share

Basic net (loss) income per share is computed by dividing net (loss) income by the weighted-average number of outstanding common shares for the period. Diluted (loss) 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 (loss) earnings per share is computed by increasing the weighted-average number of outstanding common shares computed in basic (loss) earnings per share to include the additional common shares that would be outstanding after issuance and adjusting net (loss) 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 6 for further disclosures related to net (loss) income per share.

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 21 for further disclosures related to stock-based compensation arrangements.

Warrants

On July 26, 2016 (the "Initial Issue Date"), the Company issued 810,811 warrants, which are classified as equity instruments, each with an initial exercise price, as defined in the Series A Warrants Agreement (the "Warrants Agreement"), of $55.93 per share of common stock and exercisable for one share of the Alpha's common stock, par value $0.01 per share. Pursuant to the Warrants Agreement, the warrants are exercisable for cash or on a cashless basis at any time from the Initial Issue Date until July 26, 2023, and no fractional shares shall be issued upon warrant exercises. The exercise price and the warrant share number will be adjusted in respect of certain dilutive events with respect to the common stock (namely, dividends or distributions on the common stock, share splits and combinations, above-market tender offers for common stock by the Company or a subsidiary thereof, and discounted issuances of common stock or rights or options to purchase common stock or securities convertible or exchangeable into common stock). Additionally, in the case of any reorganization (i.e., a consolidation, merger, or sale of all or substantially all of the consolidated assets of Alpha) pursuant to which the common stock is converted into cash, securities or other property, the warrants would become exercisable for such property. As of December 31, 2020 and 2019, the exercise price was $46.911 per share and the warrant share number was equal to 1.15, as adjusted in respect to certain diluted events with respect to the common stock during 2017 and 2018.

As of December 31, 2020 and 2019, of the 810,811 warrants that were originally issued, 801,370 remained outstanding, with a total of 921,576 shares underlying the un-exercised warrants. For the year ended December 31, 2020, there were no warrant exercises. For the year ended December 31, 2019, the Company issued 414 shares of common stock resulting from exercises of its Series A Warrants and, pursuant to the terms of the Warrants Agreement, withheld five of the issued shares in satisfaction of the warrant exercise price, which were subsequently reclassified as treasury stock.

Equity Method Investments

Investments in unconsolidated affiliates that the Company has the ability to exercise significant influence over, but not control, are accounted for under the equity method of accounting. Under the equity method of accounting, the Company records its proportionate share of the entity's net income or loss at each reporting period in the Consolidated Statements of Operations in other (expense) income, with a corresponding entry to increase or decrease the carrying value of the investment. The carrying value of the Company's equity method investments was $18,383 and $18,413 as of December 31, 2020 and 2019, respectively.

Recently Adopted Accounting Guidance

Leases: In February 2016, the Financial Accounting Standards Board (the "FASB") issued an Accounting Standards Update and subsequent amendments related to ASC 842, Leases, ("ASC 842"). ASC 842 requires a lessee to recognize a right-of-use asset and a lease liability on the balance sheet. The Company adopted ASC 842 effective January 1, 2019 and elected the option not to restate comparative periods in transition and also elected the hindsight practical expedient, which allows the Company to use hindsight when considering lessee options to extend or terminate leases when determining the lease term of lease arrangements for classification purposes, and the package of practical expedients for all leases within the standard, which permits the Company not to reassess its prior conclusions about lease identification, lease classification, and initial direct costs. Additionally, the Company elected the transition practical expedient to continue to account for existing and expired land easements at transition as executory contracts. Only land easements entered into or modified after the effective date of ASC 842 are accounted for as leases by the Company.

As a result of the adoption, the Company recorded operating lease right-of-use assets and lease liabilities on our Consolidated Balance Sheet. The following table summarizes the impact of the adoption of ASC 842 to the Company's Consolidated Balance Sheet:

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

		Balance at December 31, 2018	Adjustments	Balance at January 1, 2019
Assets	**Balance Sheet Classification**			
Operating lease right-of-use assets	Other non-current assets	$ —	$ 10,136	$ 10,136
Financing lease assets	Property, plant, and equipment, net	9,786	—	9,786
Total lease assets		$ 9,786	$ 10,136	$ 19,922
Liabilities	**Balance Sheet Classification**			
Operating lease liabilities - current	Accrued expenses and other current liabilities	$ —	$ 3,232	$ 3,232
Financing lease liabilities - current	Current portion of long-term debt	2,110	—	2,110
Operating lease liabilities - long-term	Other non-current liabilities	—	6,904	6,904
Financing lease liabilities - long-term	Long-term debt	4,313	—	4,313
Total lease liabilities		$ 6,423	$ 10,136	$ 16,559

The adoption of ASC 842 did not have a material impact on our Consolidated Statements of Operations, Consolidated Statements of Comprehensive Loss, or Consolidated Statements of Cash Flows. Refer to Note 12 for further disclosure requirements under the new standard.

Credit Losses: In June 2016, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") 2016-13, *Credit Losses* ("ASU 2016-13"). ASU 2016-13, along with related amendments and improvements issued in 2018 and 2019, replaces the previous incurred loss impairment methodology in U.S. GAAP with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable supportable information to inform credit loss estimates for financial instruments that are in the scope of this update, including trade accounts receivable. The Company adopted ASU 2016-13 during the first quarter of 2020. The adoption of this ASU did not have a material impact on the Company's Consolidated Financial Statements and related disclosures and resulted in a cumulative-effect adjustment to retained earnings of $440 in the Consolidated Balance Sheet as of January 1, 2020.

Fair Value Measurement: In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820), Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement* ("ASU 2018-13"). The amendments in this update modify the disclosure requirements for fair value measurements. The Company adopted ASU 2018-13 during the first quarter of 2020. The adoption of this ASU did not have a material impact on the Company's Consolidated Financial Statements and related disclosures.

Income Taxes: In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* ("ASU 2019-12"). The amendments in this update simplify the accounting for income taxes by removing certain exceptions to the general principles in Topic 740. The amendments also improve consistent application of and simplify U.S. GAAP for other areas of Topic 740 by clarifying and amending existing guidance. The Company adopted ASU 2019-12 during the first quarter of 2020. The adoption of this ASU did not have a material impact on the Company's Consolidated Financial Statements and related disclosures.

Reference Rate Reform: In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of Effects of Reference Rate Reform on Financial Reporting* ("ASU 2020-04"). The amendments in this update provide optional expedients and exceptions, if certain criteria are met, for applying U.S. GAAP to contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. The expedients and exceptions provided by the amendments do not apply to contract modifications made and hedging relationships entered into or evaluated after December 31, 2022, except for hedging relationships existing as of December 31, 2022, that an entity has elected certain optional expedients for and that are retained through the end of the hedging relationship. The Company adopted ASU 2020-04, with respect to topics in Accounting Standards Codification ("ASC") 310 *Receivables*, ASC 470 *Debt*, ASC 815 *Derivatives and Hedging* and ASC 842 *Leases*, during the first quarter of 2020. The adoption of this ASU did not have a material impact on the Company's Consolidated Financial Statements and related disclosures.

Defined Benefit Plans: In August 2018, the FASB issued ASU 2018-14, *Compensation—Retirement Benefits—Defined*

(Amounts in thousands except share and per share data)

Benefit Plans—General (Subtopic 715-20) Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans ("ASU 2018-14"). The amendments in this update modify the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. For public business entities, the standard is effective for fiscal years ending after December 15, 2020. The Company adopted ASU 2018-14 during the fourth quarter of 2020. The adoption of this ASU did not have a material impact on the Company's Consolidated Financial Statements and related disclosures.

Recent Accounting Guidance Issued Not Yet Effective

Convertible Debt and Contracts in Entity's Own Equity: In August 2020, the FASB issued ASU 2020-06, *Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40)* ("ASU 2020-06"). The amendments in this update simplify the accounting for certain financial instruments with characteristics of liabilities and equity, including convertible instruments and contracts in an entity's own equity, such as the Company's outstanding Series A warrants. For public business entities, the standard is effective for fiscal years beginning after December 15, 2021, with early adoption permitted. The adoption of this ASU is not expected to have a material impact on the Company's Consolidated Financial Statements and related disclosures.

(3) Discontinued Operations

Discontinued operations consisted of activity related to the Company's former NAPP and PRB operations.

Former NAPP Operations

On November 11, 2020, the Company entered into an unit purchase agreement (the "UPA") to sell its thermal coal mining operations located in Pennsylvania consisting primarily of its Cumberland mining complex and related property ("Cumberland Transaction") to a third party purchaser Iron Senergy Holdings, LLC ("Iron Senergy"). The Cumberland Transaction closed on December 10, 2020. In accordance with terms of the UPA, the Company transferred its equity interests in certain subsidiaries (Cumberland Contura, LLC, Contura Coal Resources, LLC, Contura Pennsylvania Land, LLC, Emerald Contura, LLC, and Contura Pennsylvania Terminal, LLC) along with total consideration of $49,987 to Iron Senergy. Pursuant to the terms of the UPA, the Company also retained certain assets and liabilities associated with its former NAPP operations. The mining permits associated with the Cumberland mining operations were obtained by Iron Senergy at closing. Due to the administrative process, the Company expects the release of the Company's existing surety bonds and the acceptance of Iron Senergy's replacement bonds to be completed by March 30, 2021.

The following table presents the details of the Cumberland Transaction:

	Year Ended December 31, 2020
Cash	$ 19,987
Surety bonding collateral	30,000
Total consideration	49,987
Transaction costs	2,205
Carrying value of assets and liabilities [1]	$ (16,079)
Loss on sale	$ 36,113

[1] Assets and liabilities were primarily comprised of property, plant and equipment, net of $32,872, deferred longwall move expenses of $15,173, and coal and supplies inventory of $5,112 and asset retirement obligations of $39,573, severance of $17,143, black lung obligations of $8,290, and subsidence liability of $3,559.

In connection with the UPA, the Company entered into certain agreements with Iron Senergy under which Iron Senergy will sell to the Company all of the coal that the Company is 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 has economic terms identical to, but offsetting, the related Cumberland CSA. If a Cumberland customer subsequently consents to assign a Cumberland CSA to Iron Senergy after closing, the related Cumberland CSA will immediately and automatically transfer to Iron Senergy and the related Cumberland Back-to-Back Coal Supply Agreements executed by the parties shall thereupon terminate as set forth therein. As the Company does not control the purchased coal prior to customer delivery, the Company will record coal purchases and sales under the related agreements on a net basis. Per terms of the Cumberland Back-to-Back Coal Supply Agreements, the Company is required to purchase and sell 2,681 and 2,615 tons of coal in 2021 and 2022 totaling $104,051 and $101,990, respectively. For the year ended December 31, 2020, the Company purchased and sold 104 tons, totaling $3,997 under the Cumberland Back-to-Back Coal Supply Agreements.

(Amounts in thousands except share and per share data)

Former PRB operations

On December 8, 2017, the Company closed a transaction ("PRB Transaction") with Blackjewel L.L.C. ("Blackjewel" or the "Buyer") to sell its Eagle Butte and Belle Ayr mines located in Wyoming (the "Western Mines" or "Western Assets"). On July 1, 2019, prior to the transfer of the permits, Blackjewel announced that it and certain affiliated entities had filed voluntary petitions for relief under Chapter 11 of the Bankruptcy Code in the United States Bankruptcy Court for the Southern District of West Virginia (the "Bankruptcy Court"). As the mine permit transfer process relating to the Company's sale of the Western Assets to Blackjewel had not been completed prior to Blackjewel's filing for Chapter 11 bankruptcy protection, the Company remained the permit holder in good standing for both mines and maintained surety bonding to cover related reclamation and other obligations. The Company remeasured the asset retirement obligations based on the expectation that the mining permits would not transfer and that Blackjewel would not perform on its contractual obligation to reclaim the properties due to the bankruptcy filing. The increase in the asset retirement obligation of $145,913 was expensed within depreciation, depletion, and amortization within discontinued operations in the Consolidated Statements of Operations during the year ended December 31, 2019 as the Company no longer owned the underlying mining assets.

On October 4, 2019, the Bankruptcy Court entered an order approving the sale by Blackjewel of the Western Assets to Eagle Specialty Materials ("ESM"), an affiliate of FM Coal, LLC ("FM Coal"). The closing of the ESM acquisition occurred on October 18, 2019 (the "ESM Transaction"). In connection with the ESM Transaction, the Company and ESM finalized an agreement which provided, among other items, for the transfer of the Western Asset permits from the Company to ESM once certain approvals for their transfer have been obtained and for the assumption by ESM of the related reclamation obligations. Additionally, the surety bonding previously maintained by the Company for the benefit of the Wyoming Department of Environmental Quality ("DEQ") was released and replaced with substitute surety bonds arranged for by ESM. Lastly, ESM agreed to indemnify the Company and its affiliates against all reclamation liabilities related to the Western Assets and against claims by the federal government, the State of Wyoming, or Campbell County, Wyoming for royalties, ad valorem taxes, and other amounts relating to the Western Assets for the period beginning on December 8, 2017.

The following table presents the details of the ESM Transaction:

	Year Ended December 31, 2019
Cash	$ 90,000
DIP obligation [(1)]	3,008
Other	331
Total consideration	$ 93,339
ARO liabilities transferred	(152,882)
Gain on sale [(2)]	$ (59,543)

[(1)] The Company paid certain Blackjewel debtor-in-possession lenders $3,008 of principal and interest pursuant to an existing agreement between the Company and those lenders.
[(2)] The Company recorded a $59,543 gain within depreciation, depletion, and amortization within discontinued operations in the Consolidated Statements of Operations during the year ended December 31, 2019 as a result of the reduction of the reclamation obligation partially offset by the consideration paid.

Additionally, in connection with the closing of the ESM Transaction, the Company paid $13,500 to Campbell County, Wyoming for accrued ad valorem back taxes for 2018 and was released from all claims related thereto. Pursuant to an agreement with ESM, the State of Wyoming Department of Revenue, and Blackjewel, the State of Wyoming Department of Revenue released the Company from any outstanding claims related to state tax obligations arising from or related to the Western Mines for any period through and including the closing date of the transaction.

On May 29, 2020, certain subsidiaries of the Company (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. Pursuant to terms of the transaction, the Company received from ESM approximately $625 in consideration for assets owned by Contura

(Amounts in thousands except share and per share data)

Coal West, LLC but not previously conveyed.

In connection with the PRB Transaction, the Company entered into certain agreements with Blackjewel under which Blackjewel would sell to the Company all of the coal that the Company was obligated to sell to customers under Western Mines coal supply agreements ("Western Mines CSAs") which existed as of the transaction closing date but did not transfer to Blackjewel at closing (each, a "PRB Back-to-Back Coal Supply Agreement"). The original PRB Back-to-Back Coal Supply Agreements were not assumed in connection with the ESM Transaction. Instead, the Company entered into new back-to-back coal supply agreements with Bluegrass Commodities LP, the sales and marketing agent for ESM, whereby the Company agreed to purchase and pay for, all coal that the Company is obligated to supply, deliver and sell under the Company's PRB coal supply agreements that were still in effect as of the closing date of the ESM Transaction. Each PRB Back-to-Back Coal Supply Agreement had economic terms identical to, but offsetting, the related Western Mines CSA. As the Company did not control the purchased coal prior to customer delivery, the Company recorded coal purchases and sales under the related agreements on a net basis. Per terms of the PRB Back-to-Back Coal Supply Agreements, the Company purchased and sold 1,149 tons of coal totaling $11,682 for the year ended December 31, 2020. For the year ended December 31, 2019, the Company purchased and sold 929 tons, totaling $9,941 under the PRB Back-to-Back Coal Supply Agreements. As of December 31, 2020, the PRB Back-to-Back Coal Supply Agreements were expired.

Major Financial Statement Components of Discontinued Operations

The major components of net loss from discontinued operations before income taxes in the Consolidated Statements of Operations are as follows:

	Year Ended December 31,	
	2020 [1]	2019
Revenues:		
Total revenues	$ 235,509	$ 289,206
Costs and expenses:		
Cost of coal sales (exclusive of items shown separately below)	215,390	256,336
Depreciation, depletion and amortization [2]	11,570	99,405
Accretion on asset retirement obligations [3]	4,154	9,894
Asset impairment and restructuring [4]	172,640	17,161
Selling, general and administrative expenses [5]	1,623	4,349
Other (income) expenses	(926)	4,742
Other non-major expense items, net	374	2,504
Loss on sale	36,113	—
Loss from discontinued operations before income taxes	$ (205,429)	$ (105,185)

(1) For the year ended December 31, 2020, discontinued operations consisted entirely of activity related to the former NAPP operations.
(2) During the year ended December 31, 2019, depreciation, depletion and amortization includes $145,913 related to an increase in the Company's estimate of its PRB asset retirement obligations which was partially offset by ($59,543) as a result of the ESM transaction. Refer to the disclosures above for details.
(3) For the year ended December 31, 2019, the former PRB operations' accretion on asset retirement obligations of $5,961 related to the asset retirement obligations recorded as a result of the Blackjewel bankruptcy filing. Refer to the disclosures above for details.
(4) Refer to Note 8.
(5) Represents professional and legal fees.

Refer to Note 6 for net loss per share information related to discontinued operations.

The major components of assets and liabilities that are classified as discontinued operations in the Consolidated Balance Sheets are as follows:

(Amounts in thousands except share and per share data)

	December 31,	
	2020	2019
Assets:		
Trade accounts receivable, net of allowance for doubtful accounts	$ 7,504	$ 20,493
Inventory, net	$ —	$ 11,771
Prepaid expenses and other current assets	$ 3,431	$ 13,628
Property, plant, and equipment, net of accumulated depreciation and amortization	$ —	$ 146,864
Other non-current assets	$ 9,473	$ 15,760
Liabilities:		
Trade accounts payable, accrued expenses and other current liabilities	$ 7,433	$ 24,769
Asset retirement obligations	$ —	$ 21,568
Workers' compensation and black lung obligations	$ 32,672	$ 36,149
Other non-current liabilities	$ 1,291	$ 4,593

The major components of cash flows related to discontinued operations were as follows:

	Year Ended December 31,	
	2020	2019
Depreciation, depletion and amortization	$ 11,570	$ 99,405
Capital expenditures	$ 34,411	$ 31,964
Other significant operating non-cash items related to discontinued operations:		
Accretion on asset retirement obligations	$ 4,154	$ 9,894
Asset impairment and restructuring	$ 172,640	$ 17,161

(4) 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.

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 two reportable segments: Met and CAPP - Thermal. In addition to the two reportable segments, the All Other category includes general corporate overhead and corporate assets and liabilities, the elimination of certain intercompany activity, and the Company's discontinued operations. Refer to Note 25 for further segment information.

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:

(Amounts in thousands except share and per share data)

	Year Ended December 31, 2020		
	Met Coal	Thermal Coal	Total
Export coal revenues	$ 870,121	$ 27,904	$ 898,025
Domestic coal revenues	362,654	152,445	515,099
Total coal revenues	$ 1,232,775	$ 180,349	$ 1,413,124

	Year Ended December 31, 2019		
	Met Coal	Thermal Coal	Total
Export coal revenues	$ 1,174,942	$ 48,166	$ 1,223,108
Domestic coal revenues	551,806	221,020	772,826
Total coal revenues	$ 1,726,748	$ 269,186	$ 1,995,934

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, 2020.

	2021	2022	2023	2024	2025	Total
Estimated coal revenues [(1)]	$ 113,676	$ 28,000	$ —	$ —	$ —	$ 141,676

[(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.

(5) Accumulated Other Comprehensive Loss

The following tables summarize the changes to accumulated other comprehensive loss during the years ended December 31, 2020 and 2019:

	Balance January 1, 2020	Other comprehensive loss before reclassifications	Amounts reclassified from accumulated other comprehensive loss	Balance December 31, 2020
Employee benefit costs	$ (58,616)	$ (60,647)	$ 7,278	$ (111,985)

	Balance January 1, 2019	Other comprehensive loss before reclassifications	Amounts reclassified from accumulated other comprehensive loss	Balance December 31, 2019
Employee benefit costs	$ (23,130)	$ (42,891)	$ 7,405	$ (58,616)

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, 2020 and 2019:

(Amounts in thousands except share and per share data)

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,		
	2020	2019	
Employee benefit costs:			
Amortization of actuarial loss [1]	$ 3,929	$ 959	Miscellaneous loss, net
Settlement [1]	3,349	6,446	Miscellaneous loss, net
Total before income tax	$ 7,278	$ 7,405	
Income tax	—	—	Income tax benefit
Total, net of income tax	$ 7,278	$ 7,405	

[1] These accumulated other comprehensive loss components are included in the computation of net periodic benefit costs for certain employee benefit plans. Refer to Note 20.

(6) Net Loss per Share

The number of shares used to calculate basic net loss 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 loss per common share is based on the number of common shares used to calculate basic net loss 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 Series A warrants. The diluted effect of outstanding stock-based instruments is determined by application of the treasury stock method. The warrants become dilutive for diluted net loss per common share calculations when the market price of the Company's common stock exceeds the exercise price. Dilutive securities are not included in the computation of diluted net loss per common share as the impact would be anti-dilutive. Refer to the Consolidated Statements of Operations for net loss per common share for the years ended December 31, 2020 and 2019.

For the years ended December 31, 2020 and 2019, 1,317,351 and 537,918 warrants, stock options, and other stock-based instruments, respectively, were excluded from the computation of dilutive net loss per 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.

Anti-dilution also occurs in periods of a net loss, and the dilutive impact of all share-based compensation awards are excluded. For the years ended December 31, 2020 and 2019, the weighted average share impact of warrants, stock options, and other stock-based instruments that were excluded from the calculation of diluted shares due to the Company incurring a net loss for the period were 142,250 and 256,668, respectively.

(7) Inventories, net

Inventories, net consisted of the following:

	December 31,	
	2020	2019
Raw coal	$ 15,084	$ 26,584
Saleable coal	69,262	100,275
Materials, supplies and other, net [1]	23,705	24,029
Total inventories, net	$ 108,051	$ 150,888

[1] Includes an increase in allowance for obsolete material and supplies inventory of $807 recorded as restructuring expense during the year ended December 31, 2020 (refer to Note 8).

(8) Asset Impairment and Restructuring

Long-lived Asset Impairment for the Year Ended December 31, 2020

(Amounts in thousands except share and per share data)

During the year ended December 31, 2020, weakening coal market conditions due in part to the impact of the global COVID-19 Pandemic, as well as the following events resulted in quarterly impairment testing:

- During the second quarter of 2020, the Company announced that it would take certain strategic actions with respect to two of its thermal coal mining complexes in an effort to strengthen its financial performance and improve forecasted liquidity. The Company announced that an underground mine and preparation plant located in West Virginia would be idled during the third quarter of 2020. In addition, the Company decided not to move forward with the construction of a new refuse impoundment at its Cumberland mine in Pennsylvania and would therefore no longer spend the significant capital required in connection with the project. As a result, the Cumberland mine was expected to cease production by the end of 2022. On December 10, 2020, the Company sold its Cumberland mining operations. Refer to Note 3 for further details.

- During the fourth quarter of 2020, changes in mine plans and the determination that certain mineral reserves previously forecasted to be mined were no longer considered economic due to poor geologic conditions reduced forecasted cash flows for one Met and one CAPP - Thermal asset group to amounts below those required for full recoverability.

The Company performed long-lived asset impairment tests as of November 30, 2020, August 31, 2020, May 31, 2020, and February 29, 2020. In total, the Company determined that indicators of impairment with respect to five long-lived asset groups within its Met reporting segment, three long-lived asset groups within its CAPP - Thermal reporting segment, and one long-lived asset group within discontinued operations existed during the year ended December 31, 2020.

The following tables present the details of the long-lived asset impairments during the year ended December 31, 2020:

	Year Ended December 31, 2020				
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year Ended
Continuing operations:					
Met	$ 32,951	$ —	$ —	$ 13,366	$ 46,317
CAPP - Thermal	758	17,385	219	16,270	34,632
All Other	—	5	—	—	5
Total from continuing operations	$ 33,709	$ 17,390	$ 219	$ 29,636	$ 80,954
Discontinued operations:	$ —	$ 144,348	$ 3,297	$ —	$ 147,645
Total long-lived asset impairment:	$ 33,709	$ 161,738	$ 3,516	$ 29,636	$ 228,599

(Amounts in thousands except share and per share data)

	Year Ended December 31, 2020				
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year Ended
Continuing operations:					
Mineral rights, net	$ 21,825	$ 2,241	$ —	$ 17,513	$ 41,579
Property, plant, and equipment, net	6,066	6,496	219	5,450	$ 18,231
Acquired mine permits, net	5,818	8,653	—	6,673	$ 21,144
Total from continuing operations	$ 33,709	$ 17,390	$ 219	$ 29,636	$ 80,954
Discontinued operations:					
Mineral rights, net	$ —	$ 16,364	$ —	$ —	$ 16,364
Property, plant, and equipment, net	—	127,984	3,297	—	$ 131,281
Total from discontinued operations	$ —	$ 144,348	$ 3,297	$ —	$ 147,645
Total long-lived asset impairment:					
Mineral rights, net	$ 21,825	$ 18,605	$ —	$ 17,513	$ 57,943
Property, plant, and equipment, net	6,066	134,480	3,516	5,450	149,512
Acquired mine permits, net	5,818	8,653	—	6,673	21,144
Total long-lived asset impairment	$ 33,709	$ 161,738	$ 3,516	$ 29,636	$ 228,599

Long-lived Asset Impairment for the Year Ended December 31, 2019

During the year ended December 31, 2019, the Company determined that indicators of impairment were present for three long-lived asset groups within each of its Met and CAPP - Thermal reporting segments and performed impairment testing as of December 31, 2019. At December 31, 2019, the Company determined that the carrying amounts of the asset groups exceeded both their undiscounted cash flows and their estimated fair values. As a result, after allocating the potential impairment to individual assets, the Company recorded a long-lived asset impairment of $60,169, of which $9,176 was recorded within Met and $50,993 was recorded within CAPP - Thermal within continuing operations of the Consolidated Statements of Operations. The long-lived asset impairment reduced the carrying values of mineral rights by $35,445, property, plant, and equipment, net, by $17,056, acquired mine permits, net, by $5,997, and long-lived assets related to asset retirement obligations by $1,671.

Additionally, during the year ended December 31, 2019, the Company recorded an asset impairment of $6,155 within continuing operations of the Consolidated Statements of Operations primarily related to the write-off of prepaid purchased coal as a result of Blackjewel's Chapter 11 bankruptcy filing on July 1, 2019. During the year ended December 31, 2019, the Company also recorded an asset impairment of $17,161 within discontinued operations of the Consolidated Statements of Operations which was primarily related to the write-off of tax related indemnification receivables within the former PRB operations. The Company was considered to be the primary obligor for certain taxes that Blackjewel was contractually obligated to pay. During the year ended December 31, 2019, the Company recorded an impairment charge for the offsetting receivable form Blackjewel as a result of the Blackjewel bankruptcy filing. Refer to Note 3 for further information.

Restructuring

As a result of the strategic actions discussed above, the Company recorded restructuring expense during the year ended December 31, 2020 as follows:

	Year Ended December 31, 2020		
	Total Restructuring	Continuing Operations (3)	Discontinued Operations
Severance and employee-related benefits (1)	$ 26,037	$ 2,117	$ 23,920
Other costs (2)	1,882	807	1,075
Total restructuring expense	$ 27,919	$ 2,924	$ 24,995

(Amounts in thousands except share and per share data)

(1) Severance and employee-related benefits were considered probable and estimable based on provisions of contractual agreements and existing employee benefit plans.
(2) The year ended December 31, 2020 includes accelerated amortization of deferred longwall move expenses of $668, allowance for advanced mining royalties of $407, and allowance for obsolete materials and supplies inventory of $807.
(3) During the year ended December 31, 2020, total restructuring expenses of $2,087 and $837 were recorded within the reportable segments CAPP - Thermal and All Other, respectively. The total restructuring expenses of $2,924 affected Accrued expenses and other current liabilities, Other non-current liabilities, inventories, net, and Other non-current assets.

There were no restructuring expenses recorded during the year ended December 31, 2019.

(9) Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following:

	December 31,	
	2020	2019
Prepaid freight	$ 8,515	$ 8,268
Notes and other receivables	13,245	8,447
Short-term restricted cash	9,311	12,363
Short-term deposits	47	689
Prepaid insurance	6,510	9,591
Refundable income taxes	64,565	33,915
Prepaid bond premium	2,576	2,454
Other prepaid expenses	1,483	1,996
Total prepaid expenses and other current assets	$ 106,252	$ 77,723

(10) Property, Plant, and Equipment, net

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

	December 31,	
	2020	2019
Plant and mining equipment	$ 603,463	$ 600,495
Mine development	96,008	36,721
Land	26,606	30,506
Office equipment, software and other	1,379	1,396
Construction in progress	18,587	23,658
Total property, equipment and mine development costs	746,043	692,776
Less accumulated depreciation, depletion and amortization	382,423	256,378
Total property, plant, and equipment, net	$ 363,620	$ 436,398

Included in plant and mining equipment are assets under financing leases totaling $7,907 and $14,328 with accumulated depreciation of $3,645 and $4,641 as of December 31, 2020 and December 31, 2019, respectively.

Depreciation and amortization expense associated with property, plant, equipment, and non-mineral asset retirement obligation assets, net, was $153,631 and $201,206 for the years ended December 31, 2020 and 2019, respectively.

Depreciation expense for the years ended December 31, 2020 and 2019 includes a credit of ($3,689) and ($1,522), respectively, related to revisions to asset retirement obligations. Refer to Note 17 for further disclosures related to asset retirement obligations.

(Amounts in thousands except share and per share data)

During the years ended December 31, 2020 and 2019, the Company recorded long-lived asset impairments which reduced the carrying value of property, plant, and equipment, net, by $18,231 and $17,056, respectively. Refer to Note 8 for further information.

As of December 31, 2020, the Company had commitments to purchase approximately $5,008 and $170 of new equipment, expected to be acquired at various dates in 2021 and 2023, respectively.

(11) Other Non-Current Assets

Other non-current assets consisted of the following:

	December 31,	
	2020	2019
Operating lease right-of-use assets	$ 5,671	$ 7,298
Long-term deposits	28,200	9,621
Long-term restricted investments	23,768	19,399
Equity method investments	18,383	18,413
Federal income tax receivable	—	64,160
Workers' compensation receivables	48,320	52,757
Other	25,040	17,827
Total other non-current assets	$ 149,382	$ 189,475

(12) 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, 2020 and 2019, 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, 2020 and 2019.

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, 2020, the Company does not intend to exercise any termination options on existing leases.

As of December 31, 2020 and 2019, the Company had the following right-of-use assets and lease liabilities within the Company's Consolidated Balance Sheets:

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

		December 31, 2020	December 31, 2019
Assets	**Balance Sheet Classification**		
Financing lease assets	Property, plant, and equipment, net	$ 4,262	$ 9,687
Operating lease right-of-use assets	Other non-current assets	5,671	7,298
Total lease assets		$ 9,933	$ 16,985
Liabilities	**Balance Sheet Classification**		
Financing lease liabilities - current	Current portion of long-term debt	$ 2,014	$ 3,266
Operating lease liabilities - current	Accrued expenses and other current liabilities	595	1,402
Financing lease liabilities - long-term	Long-term debt	1,996	4,651
Operating lease liabilities - long-term	Other non-current liabilities	5,076	5,896
Total lease liabilities		$ 9,681	$ 15,215

Total lease costs and other lease information for the years ended December 31, 2020 and 2019 included the following:

	Year Ended December 31, 2020	Year Ended December 31, 2019
Lease cost [(1)]		
Financing lease cost:		
Amortization of leased assets	$ 3,238	$ 3,738
Interest on lease liabilities	358	477
Operating lease cost	2,105	2,389
Short-term lease cost	1,518	1,851
Total lease cost	$ 7,219	$ 8,455

(1) The Company had no variable lease costs or sublease income for the years ended December 31, 2020 and 2019.

	Year Ended December 31, 2020	Year Ended December 31, 2019
Other information		
Cash paid for amounts included in the measurement of lease liabilities	$ 7,157	$ 8,349
Operating cash flows from financing leases	$ 358	$ 463
Operating cash flows from operating leases	$ 3,623	$ 4,240
Financing cash flows from financing leases	$ 3,176	$ 3,646
Right-of-use assets obtained in exchange for new financing lease liabilities	$ 221	$ 1,429
Right-of-use assets obtained in exchange for new operating lease liabilities	$ (12)	$ 371
Lease Term and Discount Rate		
Weighted-average remaining lease term in months - financing leases	23.3	33.7
Weighted-average remaining lease term in months - operating leases	101.4	105.1
Weighted-average discount rate - financing leases	6.1 %	5.4 %
Weighted-average discount rate - operating leases	11.5 %	11.4 %

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 Sheet as of December 31, 2020:

(Amounts in thousands except share and per share data)

	Financing Leases	Operating Leases
Lease cost		
2021	$ 2,210	$ 1,210
2022	1,827	1,076
2023	269	1,101
2024	6	982
2025	—	897
Thereafter	—	4,018
Total future minimum lease payments	$ 4,312	$ 9,284
Imputed interest	(302)	(3,613)
Present value of future minimum lease payments	$ 4,010	$ 5,671

As of December 31, 2020, the Company had no leases with future commencement dates that will create significant rights or obligations for the Company.

(13) Stock Repurchases

In May 2019, the Company's Board of Directors adopted a capital return program that permits the Company to return to stockholders up to an aggregate amount of $250,000 of capital. The capital return program does not have a fixed expiration date and returns of capital may take the form of share repurchases, dividends or a combination thereof. Any share repurchases may be made from time to time through open market transactions, block trades, privately negotiated transactions, tender offers, or otherwise. Any returns of capital under the program will be at the discretion of the Company's Board of Directors and are subject to market and business conditions, levels of available liquidity, the Company's cash needs, restrictions under agreements or obligations, legal or regulatory requirements or restrictions, and other relevant factors.

On August 29, 2019, the Company announced that its Board of Directors had approved a stock repurchase plan (the "Company Repurchase Plan") to acquire up to $100,000 in the aggregate of the Company's common stock at prices as set forth in such plan over a specified period. Through September 30, 2019, the Company had repurchased an aggregate of 529,303 shares of common stock under the Company Repurchase Plan for an aggregate purchase price of $15,969 (comprised of $15,953 of share repurchases and $16 of related fees) for an average price paid per share of $30.17. As of October 1, 2019, the Company suspended the Company Repurchase Plan.

Additionally, on September 12, 2019, the Company entered into a common stock repurchase agreement with Whitebox Multi-Strategy Partners, L.P., Whitebox Asymmetric Partners, L.P., Whitebox Credit Partners, L.P. and Whitebox Institutional Partners, L.P. (together, "Whitebox"). Pursuant to terms of the common stock repurchase agreement, the Company repurchased an aggregate of 500,000 shares of common stock from Whitebox at $32.99 per share for an aggregate purchase price of $16,495.

(Amounts in thousands except share and per share data)

(14) Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following:

	December 31, 2020	December 31, 2019
Wages and benefits	$ 40,330	$ 37,983
Workers' compensation	10,355	11,317
Black lung	6,784	7,409
Taxes other than income taxes	21,540	24,662
Current portion of asset retirement obligations	24,990	38,731
Accrued interest and fees	15,902	4,362
Deferred revenue	13,197	—
Freight accrual	2,610	5,851
Other	4,698	9,164
Total accrued expenses and other current liabilities	$ 140,406	$ 139,479

(15) Long-Term Debt

Long-term debt consisted of the following:

	December 31, 2020	December 31, 2019
Term Loan Credit Facility - due June 2024	$ 553,373	$ 558,991
ABL Facility - due April 2022	3,350	—
LCC Note Payable	27,500	45,000
LCC Water Treatment Obligation	6,875	9,375
Other [1]	8,475	9,263
Debt discount and issuance costs	(17,046)	(29,695)
Total long-term debt	582,527	592,934
Less current portion	(28,830)	(28,476)
Long-term debt, net of current portion	$ 553,697	$ 564,458

[1] Includes financing leases, refer to Note 12 for additional information.

Term Loan Credit Facility - due June 2024

On June 14, 2019, the Company entered into a Credit Agreement with Cantor Fitzgerald Securities, as administrative agent and collateral agent, and the other lenders party thereto (as defined therein) that provides for a senior secured term loan facility in the aggregate principal amount of $561,800 with a maturity date of June 14, 2024 (the "Term Loan Credit Facility"). Principal repayments equal to approximately $1,405 are due each March, June, September and December (commencing with September 30, 2019) with the final principal repayment installment repaid on the maturity date and in an amount equal to the aggregate principal amount outstanding on such date. The Term Loan Credit Facility bears an interest rate per annum based on the character of the loan (defined as either "Base Rate Loan" or "Eurocurrency Rate Loan"). Each loan type bears interest at a rate per annum comprised of a base rate (as defined) plus an applicable percentage (6.00% for Base Rate Loans and 7.00% for Eurocurrency Rate Loans on or prior to the second anniversary of the Closing Date and 7.00% or 8.00% thereafter (the "Applicable Rate")). The Eurocurrency base rate is subject to a 2.00% floor. Interest accrued on each Base Rate Loan is payable in arrears on the last business day of each March, June, September and December and the maturity date. Interest accrued on each Eurocurrency Rate Loan is payable in arrears on the last day of each interest period as defined therein. As of December 31, 2020, the borrowings made under the Term Loan Credit Facility were comprised of Eurocurrency Rate Loans with an interest rate of 9.00%, calculated as the Eurocurrency rate during the period plus an applicable rate of 7.00%. As of December 31, 2020, the carrying value of the Term Loan Credit Facility was $540,643, with $5,618 classified as current, within the Consolidated

Balance Sheets. As of December 31, 2019, the carrying value of the term loan credit facility was $538,765, with $5,618 classified as current, within the Consolidated Balance Sheets.

The Term Loan Credit Facility was provided primarily by certain of the Company's existing shareholders (related parties) as of the agreement date. As such, the Company analyzed various factors of the transaction and concluded the Term Loan Credit Facility was issued at a reasonable market rate and therefore considered to be an arm's length transaction.

The Company used the proceeds from the Term Loan Credit Facility to repay the outstanding principal balance of $543,125 under the Amended and Restated Credit Agreement dated November 9, 2018 and fees related to such refinancing. The Company recorded a loss on modification of debt of $255, primarily related to modification fees paid under the refinance, and a loss on extinguishment of debt of $26,204, primarily related to the write-off of outstanding debt discounts and unamortized debt issuance costs under the Amended and Restated Credit Agreement dated November 9, 2018, which are recorded in loss on modification and extinguishment of debt within the Consolidated Statements of Operations for the year ended December 31, 2019.

All obligations under the Term Loan Credit Facility are guaranteed by substantially all of Alpha's direct and indirect subsidiaries. Certain obligations under the Term Loan Facility are secured by a senior lien, subject to certain exceptions (including the ABL Priority Collateral described below), by substantially all of Alpha's assets and the assets of Alpha's subsidiary guarantors ("Term Loan Priority Collateral"), in each case subject to exceptions. The obligations under the Term Loan Credit Facility are also secured by a junior lien, again subject to certain exceptions, against the ABL Priority Collateral. The Term Loan Facility contains negative and affirmative covenants including certain financial covenants that are more flexible than the covenants on the Amended and Restated Credit Agreement dated November 9, 2018. The Company was in compliance with all covenants under this agreement as of December 31, 2020.

Amended and Restated Asset-Based Revolving Credit Agreement

On November 9, 2018, the Company entered into the Amended and Restated Asset-Based Revolving Credit Agreement with Citibank N.A. as administrative agent, collateral agent, and swingline lender and the other lenders party thereto (the "Lenders"), and Citibank N.A., Barclays Bank PLC, BMO Harris Bank N.A. and Credit Suisse AG as letter of credit issuers ("LC Lenders"). The Amended and Restated Asset-Based Revolving Credit Agreement amended and restated the Asset-Based Revolving Credit Agreement dated April 3, 2017, in its entirety, and includes a senior secured asset-based revolving credit facility (the "ABL Facility"). Under the ABL Facility, the Company may borrow cash from the Lenders (as defined therein) or cause the L/C Issuers (as defined therein) to issue letters of credit, on a revolving basis, in an aggregate amount of up to $225,000, of which no more than $200,000 may be drawn through letters of credit. Any borrowings under the ABL Facility will have a maturity date of April 3, 2022 and will bear interest based on the character of the loan (defined as either "Base Rate Loan" or "Eurocurrency Rate Loan") plus an applicable rate ranging from 1.00% to 1.50% for Base Rate Loans and 2.00% to 2.50% for Eurocurrency Rate Loans, depending on the amount of credit available. Pursuant to terms of the Amended and Restated Asset-Based Revolving Credit Agreement at each notice period, the Company elects the character of the loan, the interest period, and may 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. The Amended and Restated Asset-Based Revolving Credit Agreement provides that a specified percentage of billed, unbilled and approved foreign receivables and raw and clean inventory meeting certain criteria are eligible to be counted for purposes of collateralizing the amount of financing available, subject to certain terms and conditions. Availability under the ABL Facility is calculated on a monthly basis and fluctuates based on qualifying amounts of coal inventory and trade accounts receivable (the "Borrowing Base") and the facility's covenant limitations related to the Fixed Charge Coverage Ratio (as defined in therein). In accordance with terms of the ABL Facility, the Company may be required to collateralize the ABL Facility to the extent outstanding borrowings and letters of credit under the ABL Facility exceed the Borrowing Base after considering covenant limitations. Due to fluctuations of the Borrowing Base, the Company was required to post $25,000 of collateral in January 2021 to remain in compliance with the terms of the ABL Facility as of December 31, 2020.

On March 20, 2020, the Company borrowed $57,500 principal amount under the ABL Facility. The funds were borrowed to augment the Company's short-term operational flexibility in the face of uncertainty created by the current spread of the COVID-19 virus and its potential effects (see further discussion in Note 1). As of December 31, 2020, the borrowings made under the ABL Facility were comprised of Eurocurrency Rate Loans with an interest rate of 2.73%, calculated as the Eurocurrency rate during the period plus an applicable rate of 2.50%. The interest rate is subject to periodic adjustment and is subject to adjustment again on April 7, 2021. As of December 31, 2020, the carrying value of the ABL Facility was $3,350, all of which was classified as long-term within the Consolidated Balance Sheets. As of December 31, 2019, the Company had no borrowings under the ABL Facility.

(Amounts in thousands except share and per share data)

Any letters of credit issued under the ABL Facility will bear a commitment fee rate ranging from 0.25% to 0.375% depending on the amount of availability per terms of the agreement, and a fronting fee of 0.25% of the face amount under each letter of credit, payable to the ABL Facility's administrative agent. As of December 31, 2020 and December 31, 2019, the Company had $123,108 and $99,876 letters of credit outstanding under the ABL Facility, respectively.

The ABL Facility is guaranteed by substantially all of Alpha's direct and indirect subsidiaries (together with the Alpha, the "Loan Parties") and secured by all or substantially all assets of the Loan Parties, including equity in its direct domestic subsidiaries and first-tier foreign subsidiaries, as collateral for the obligations under the ABL Facility. The ABL Facility has a first lien on ABL priority collateral and a second lien on term loan priority collateral. The Amended and Restated Asset-Based Revolving Credit Agreement, as amended, 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, 2020.

LCC Note Payable

As a result of the Merger, the Company assumed a note payable to Lexington Coal Company ("LCC") in the aggregate amount of $62,500 (the "LCC Note Payable") and with a maturity date of July 26, 2022. The LCC Note Payable has no stated interest rate and an imputed interest rate of 12.45%. Principal repayments equal to $17,500 are due each July during 2019, 2020 and 2021, with the final principal payment of $10,000 due on the maturity date. The carrying value of the LCC Note Payable was $24,423 and $37,695, with $17,500 and $17,500 reported within the current portion of long-term debt as of December 31, 2020 and 2019, respectively.

LCC Water Treatment Stipulation

As a result of the Merger, the Company assumed an obligation to contribute $12,500 into Lexington Coal Company's water treatment restricted cash accounts (the "LCC Water Treatment Stipulation"). Contributions equal to $625 are due each January, April, July and October from 2019 through 2023. The LCC Water Treatment Stipulation has no stated interest rate and an imputed interest rate of 13.12%. The carrying value of the LCC Water Treatment Stipulation was $5,636 and $7,211, with $1,875 and $1,875 reported within the current portion of long-term debt as of December 31, 2020 and 2019, respectively.

Future Maturities

Future maturities of long-term debt as of December 31, 2020 are as follows:

2021	$	28,830
2022		24,815
2023		9,300
2024		536,628
Total long-term debt	$	599,573

(16) Acquisition-Related Obligations

Acquisition-related obligations consisted of the following:

(Amounts in thousands except share and per share data)

	December 31,	
	2020	2019
Contingent Revenue Obligation	$ 28,967	$ 52,427
Environmental Settlement Obligations	10,391	16,305
Reclamation Funding Liability	—	12,000
UMWA Funds Settlement Liability	2,000	4,000
Discount	(1,491)	(4,834)
Total acquisition-related obligations	39,867	79,898
Less current portion	(19,099)	(33,639)
Acquisition-related obligations, net of current portion	$ 20,768	$ 46,259

The Company entered into various settlement agreements with Alpha Natural Resources, Inc. and/or the Alpha Natural Resources, Inc. bankruptcy successor ANR, Inc. and third parties as part of the Alpha Natural Resources, Inc. bankruptcy reorganization process. The Company assumed acquisition-related obligations through those settlement agreements which became effective on July 26, 2016, the effective date of Alpha Natural Resources, Inc.'s plan of reorganization. Additionally, as a result of the Merger, the Company assumed certain acquisition-related obligations pursuant to the terms stipulated within the bankruptcy settlement previously entered into by the Merger Companies.

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 will be limited to revenues derived from legacy operations for the Merger Companies and will not include revenues related to legacy Alpha Metallurgical Resources, Inc. operations. The Contingent Revenue Obligation consists 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. As of December 31, 2020 and 2019, the carrying value of the Contingent Revenue Obligation was $28,967 and $52,427, with $11,393 and $14,646 classified as current, respectively, and classified as an acquisition-related obligation in the Consolidated Balance Sheets. Refer to Note 18 for further disclosures related to the fair value assignment and methods used.

During the second quarter of 2020, the Company paid $15,084, including $374 of unclaimed unsecured claims distributions, pursuant to terms of the Contingent Revenue Obligation. During the second quarter of 2019, the Company paid $9,627 pursuant to terms of the Contingent Revenue Obligation.

Environmental Settlement Obligations

As a result of the Merger, the Company assumed certain environmental settlement obligations (the "Environmental Settlement Obligations") pursuant to the terms stipulated within the bankruptcy settlement previously entered into by the Merger Companies. These obligations include payments to a third-party environmental agency and the funding of certain reclamation related projects through 2022. As of December 31, 2020 and 2019, the carrying value of the Environmental Settlement Obligations was $9,237 and $13,594, net of discounts of $1,154 and $2,711, with $6,044 and $6,185 classified as current, respectively, all of which was classified as an acquisition-related obligation in the Consolidated Balance Sheets.

Reclamation Funding Agreement

Pursuant to the Reclamation Funding Agreement dated July 12, 2016, the Company paid the aggregate amount of $50,000 into the various Restricted Cash Reclamation Accounts as follows: $8,000 immediately upon the effective date of the agreement; $10,000 on the anniversary of the effective date in each of 2017, 2018, and 2019; and $12,000 on the anniversary of the effective date in 2020. As of December 31, 2020, the Company has no remaining payments for the Funding of Restricted Cash Reclamation liability. As of December 31, 2019 the carrying value of the Funding of Restricted Cash Reclamation liability was $10,808, net of discounts of $1,192, all of which was classified as a current acquisition-related obligation in the Consolidated Balance Sheets.

(Amounts in thousands except share and per share data)

(17) Asset Retirement Obligations

The following table summarizes the changes in asset retirement obligations for the years ended December 31, 2020 and 2019:

Total asset retirement obligations at December 31, 2018	$ 192,038
Merger measurement-period adjustments	12,718
Accretion for the period [1]	23,852
Sites added during the period	5,112
Revisions in estimated cash flows [2]	(7,162)
Expenditures for the period	(23,421)
Total asset retirement obligations at December 31, 2019	$ 203,137
Accretion for the period	26,504
Sites added during the period	621
Revisions in estimated cash flows [2]	(43,765)
Expenditures for the period	(21,433)
Total asset retirement obligations at December 31, 2020	165,064
Less current portion [3]	(24,990)
Long-term portion	$ 140,074

[1] Amount does not include the accretion related to asset retirement obligations classified as liabilities held for sale.
[2] The revisions in estimated cash flows resulted primarily from discount rate adjustments and changes in mine plans.
[3] Included within accrued expenses and other current liabilities on the Company's Consolidated Balance Sheets. Refer to Note 14.

(18) 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.

The carrying amounts for cash and cash equivalents, trade accounts receivable, net, prepaid expenses and other current assets, short-term and long-term restricted cash, short-term and long-term deposits, trade accounts payable, and accrued expenses and other current liabilities approximate fair value as of December 31, 2020 and 2019 due to the short maturity of these instruments.

The following tables set forth by level, within the fair value hierarchy, the Company's long-term debt at fair value as of December 31, 2020 and 2019:

	December 31, 2020				
	Carrying Amount [1]	Total Fair Value	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Term Loan Credit Facility - due June 2024	$ 540,643	$ 379,614	$ —	$ 379,614	$ —
ABL Facility - due April 2022	3,350	3,057	—	—	3,057
LCC Note Payable	24,423	20,328	—	—	20,328
LCC Water Treatment Obligation	5,636	4,281	—	—	4,281
Total long-term debt	$ 574,052	$ 407,280	$ —	$ 379,614	$ 27,666

(Amounts in thousands except share and per share data)

	December 31, 2019				
	Carrying Amount [1]	Total Fair Value	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Term Loan Credit Facility - due June 2024	$ 538,765	$ 461,402	$ 461,402	$ —	$ —
LCC Note Payable	37,695	33,884	—	—	33,884
LCC Water Treatment Obligation	7,211	6,280	—	—	6,280
Total long-term debt	$ 583,671	$ 501,566	$ 461,402	$ —	$ 40,164

[1] Net of debt discounts and debt issuance costs.

The following tables set forth by level, within the fair value hierarchy, the Company’s acquisition-related obligations at fair value as of December 31, 2020 and 2019:

	December 31, 2020				
	Carrying Amount [1]	Total Fair Value	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
UMWA Funds Settlement Liability	$ 1,662	$ 1,426	$ —	$ —	$ 1,426
Environmental Settlement Obligations	9,237	7,760	—	—	7,760
Total acquisition-related obligations	$ 10,899	$ 9,186	$ —	$ —	$ 9,186

	December 31, 2019				
	Carrying Amount [1]	Total Fair Value	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
UMWA Funds Settlement Liability	$ 3,069	$ 2,929	$ —	$ —	$ 2,929
Reclamation Funding Liability	10,808	10,658	—	—	10,658
Environmental Settlement Obligations	13,594	12,197	—	—	12,197
Total acquisition-related obligations	$ 27,471	$ 25,784	$ —	$ —	$ 25,784

[1] Net of discounts.

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, 2020 and 2019. 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, 2020			
	Total Fair Value	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Contingent Revenue Obligation	$ 28,967	$ —	$ —	$ 28,967
Trading securities	$ 22,498	$ 20,092	$ 2,406	$ —

(Amounts in thousands except share and per share data)

	December 31, 2019			
	Total Fair Value	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Contingent Revenue Obligation	$ 52,427	$ —	$ —	$ 52,427
Trading securities	$ 11,021	$ 5,506	$ 5,515	$ —

The following table is a reconciliation 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, 2019	Payments	Gain Recognized in Earnings	Transfer In (Out) of Level 3 Fair Value Hierarchy	December 31, 2020
Contingent Revenue Obligation	$ 52,427	$ (14,710)	$ (8,750)	$ —	$ 28,967

(1) The gain recognized in earnings resulted primarily from a change in the forecasted future revenue associated with this obligation and an increase in annualized volatility as of December 31, 2020.

	December 31, 2018	Payments	Measurement-Period Adjustments	Gain Recognized in Earnings	Transfer In (Out) of Level 3 Fair Value Hierarchy	December 31, 2019
Contingent Revenue Obligation	$ 59,880	$ (9,627)	$ 5,738	$ (3,564)	$ —	$ 52,427

(1) The measurement-period adjustments are related to Merger recorded during the year ended December 31, 2019.

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

Level 1 Fair Value Measurements

Term Loan Credit Facility - due June 2024 - As of December 31, 2019, the fair value is based on observable market data.

Trading Securities - Includes money market funds and other cash equivalents. The fair value is based on observable market data.

Level 2 Fair Value Measurements

Term Loan Credit Facility - due June 2024 - As of December 31, 2020, the fair value is based on the average between bid and ask prices provided by a third-party. As the fair value is based on observable market inputs, the Company has classified the fair value within Level 2 of the fair value hierarchy. Due to limited trading volume in the Term Loan Credit Facility, the Company reclassified the fair value from Level 1 within the fair value hierarchy during the year ended December 31, 2020.

Trading Securities - Includes certificates of deposit, mutual funds, corporate debt securities and U.S. treasury and agency securities. The fair values of the Company's trading securities 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.

Level 3 Fair Value Measurements

ABL Facility - due April 2022 - Observable transactions are not available to aid in determining the fair value of this item. Therefore, the fair value was derived by using the expected present value approach in which estimated cash flows are discounted using a risk-free interest rate adjusted for credit risk (discount rate of approximately 9%) as of December 31, 2020.

(Amounts in thousands except share and per share data)

LCC Note Payable, LCC Water Treatment Obligation, UMWA Funds Settlement Liability, Environmental Settlement Obligations and Reclamation Funding Liability - Observable transactions are not available to aid in determining the fair value of these items. Therefore, the fair value was derived by using the expected present value approach in which estimated cash flows are discounted using a risk-free interest rate adjusted for credit risk (discount rates of approximately 34% and 21% as of December 31, 2020 and December 31, 2019, respectively).

Contingent Revenue Obligation - The fair value of the contingent revenue obligation was estimated using a Black-Scholes pricing model and is marked to market at each reporting period with changes in value reflected in earnings. 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. The range of significant unobservable inputs used to value the contingent revenue obligation as of December 31, 2020 and December 31, 2019, are set forth in the following table:

	December 31, 2020	December 31, 2019
Forecasted future revenue	$0.9 - $1.1 billion	$1.1 - $1.2 billion
Stated royalty rate	1.0% - 1.5%	1.0% - 1.5%
Annualized volatility	19.4% - 52.1% (28.0%)	9.4% - 28.1% (19.9%)

(19) Income Taxes

Total income tax benefit provided on loss before income taxes was allocated as follows:

	Year Ended December 31, 2020	Year Ended December 31, 2019
Continuing operations	$ (2,164)	$ (53,287)
Discontinued operations	—	(8,484)
Total	$ (2,164)	$ (61,771)

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

	Year Ended December 31, 2020	Year Ended December 31, 2019
Current tax (benefit) expense:		
Federal	$ (35,187)	$ (45,356)
State	(99)	1,891
Total current	$ (35,286)	$ (43,465)
Deferred tax (benefit) expense:		
Federal	$ 33,348	$ (747)
State	(226)	(9,075)
Total deferred	$ 33,122	$ (9,822)
Total income tax benefit:		
Federal	$ (1,839)	$ (46,103)
State	(325)	(7,184)
Total	$ (2,164)	$ (53,287)

A reconciliation of statutory federal income tax benefit on loss from continuing operations to the actual income tax benefit is as follows:

(Amounts in thousands except share and per share data)

	Year Ended December 31,	
	2020	2019
Federal statutory income tax benefit	$ (51,163)	$ (57,310)
Increase (reductions) in taxes due to:		
Percentage depletion allowance	(2,039)	(6,270)
AMT sequestration refund	(2,123)	—
State taxes, net of federal tax impact	(9,640)	(10,255)
State tax rate and NOL change, net of federal tax impact	(1,235)	(4,172)
Change in valuation allowances	59,929	10,936
Net operating loss carryback	—	(14,234)
Amended return - capital loss impact	—	919
Non-deductible goodwill impairment	—	26,114
Stock-based compensation	1,739	(1,085)
Other, net	2,368	2,070
Income tax benefit	$ (2,164)	$ (53,287)

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,	
	2020	2019
Deferred tax assets:		
Asset retirement obligations	$ 41,268	$ 51,114
Reserves and accruals not currently deductible	12,131	8,265
Workers' compensation benefit obligations	59,478	54,128
Pension obligations	52,598	44,413
Equity method investments	2,050	2,509
Alternative minimum tax credit carryforwards	—	33,065
Loss carryforwards, net of Section 382 limitation	255,772	142,510
Acquisition-related obligations	10,002	17,902
Other	10,976	12,299
Gross deferred tax assets	444,275	366,205
Less valuation allowance	(263,387)	(133,020)
Deferred tax assets	$ 180,888	$ 233,185
Deferred tax liabilities:		
Property, plant and mineral reserves	$ (141,549)	$ (145,487)
Acquired intangibles, net	(22,037)	(27,140)
Prepaid expenses	(6,211)	(6,780)
Restricted cash	(11,516)	(20,313)
Other	(55)	(822)
Total deferred tax liabilities	(181,368)	(200,542)
Net deferred tax assets	$ (480)	$ 32,643

Changes in the valuation allowance were as follows:

(Amounts in thousands except share and per share data)

	Year Ended December 31,	
	2020	2019
Valuation allowance beginning of period	$ 133,020	$ 94,802
Increase in valuation allowance recorded to income tax benefit	117,829	29,950
Increase in valuation allowance not affecting income tax expense	12,538	8,268
Valuation allowance end of period	$ 263,387	$ 133,020

On December 22, 2017, President Trump signed into law legislation commonly referred to as the “Tax Cuts and Jobs Act” (“TCJA”). Among other provisions, the TCJA repealed the corporate AMT and provided a mechanism for corporations to monetize their alternative minimum tax credits (“AMT Credits”) as a refundable credit during the 2018 through 2021 tax years. On March 27, 2020, President Trump signed into law legislation referred to as the CARES Act. The CARES Act modified the AMT Credits provision such that a corporate taxpayer’s remaining AMT Credits would be refunded in the 2019 tax year rather than the 2019 through 2021 tax years. As of December 31, 2019, the Company recorded a current federal income tax receivable of $33,065 and a deferred tax asset of $33,065 in relation to its refundable AMT Credits. During the first quarter of 2020 and following enactment of the CARES Act, the Company reclassified the $33,065 deferred tax asset to a current federal income tax receivable. The Company received the $66,130 AMT Credit refund in the fourth quarter of 2020. In addition, the Company received $2,123 related to AMT Credits claimed in prior tax years under a different Internal Revenue Code section, which were previously and erroneously subjected to the budgetary sequestration provisions. As of December 31, 2020, the Company does not expect to receive any further benefits related to AMT Credits.

The Company acquired the core assets of Alpha Natural Resources, Inc. as part of the Alpha Natural Resources, Inc. bankruptcy reorganization in transactions intended to be treated as a tax-free reorganization for U.S. federal income tax purposes. As a result of these transactions, the Company inherited the tax basis of the core assets and the net operating loss and other carryforwards of Alpha Natural Resources, Inc. On December 31, 2016, the net operating loss carryforwards and other carryforwards were reduced under Internal Revenue Code Section 108 due to the cancellation of indebtedness resulting from the Alpha Natural Resources, Inc. bankruptcy reorganization. Due to the change in ownership, the net operating loss and other carryforwards inherited in the Alpha Natural Resources, Inc. bankruptcy reorganization are subjected to significant limitations on their use in future years.

Due to the Company’s formation through acquisition of certain core coal assets as part of the Alpha Natural Resources, Inc. bankruptcy reorganization, the Company does not have a long history of operating results. Additionally, significant ownership change limitations limit the ability of the Company to utilize its net operating loss and other carryforwards in future years. The Company currently is relying primarily on the reversal of taxable temporary differences, along with consideration of taxable income via carryback to prior years and tax planning strategies, to support the realization of deferred tax assets. The Company assesses the realizability of its deferred tax assets, including scheduling the reversal of its deferred tax 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 temporary differences giving rise to the deferred tax assets that will be realized. The valuation allowance recorded represents the portion of deferred tax assets for which the Company is unable to support realization through the methods described above. The Company has concluded that it is more likely than not that the remaining deferred tax assets, net of valuation allowances, are realizable.

At December 31, 2020, the Company has regular tax net operating loss carryforwards for federal income tax purposes of approximately $1,737,000. This includes $1,011,000 that are available to offset regular federal taxable income subject to an annual Internal Revenue Code Section 382 limitation of approximately $1,000, $56,000 that are subject to an annual Section 382 limitation of approximately $18,300, and $324,000 that are subject to an annual Section 382 limitation of approximately $17,500. These federal net operating loss carryforwards were generated before 2018 and will expire between years 2030 and 2037. The Company also has $346,000 of federal net operating loss carryforwards with an indefinite carryforward period that can be used to offset up to 80% of taxable income. The Company has capital loss carryforwards of approximately $339,000, of which $65,000 are subject to an annual Section 382 limitation of approximately $1,000 and $51,000 are subject to an annual Section 382 limitation of approximately $17,500. The capital loss carryforwards will expire between years 2021 and 2025. A full valuation allowance is recorded against the capital loss carryforwards.

(Amounts in thousands except share and per share data)

During the third quarter of the year ended December 31, 2020, the Company recorded a decrease in unrecognized tax benefits of approximately $20,788 as a result of the issuance of final regulatory guidance from the IRS. The decrease in unrecognized tax benefits did not impact the Company's effective tax rate for the year ended December 31, 2020.

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, 2020 and 2019, the Company had no accrued interest and penalties.

The following reconciliation illustrates the Company's liability for uncertain tax positions:

	Year Ended December 31,	
	2020	2019
Unrecognized tax benefits - beginning of period	$ 20,788	$ —
Additions for tax positions of prior years	—	5,740
Additions for tax positions of current year	—	15,048
Reductions for tax positions of prior years	(20,788)	—
Unrecognized tax benefits - end of period	$ —	$ 20,788

As of December 31, 2020, tax years 2016 - 2020, which include the impact of net operating loss and other carryforwards and tax basis acquired from Alpha Natural Resources, Inc., remain open to federal and state examination. The IRS initiated a corporate income tax examination during the third quarter of 2020 for the Company's 2016 tax year and related net operating loss carryback. This examination was open and in progress as of December 31, 2020.

(20) Employee Benefit Plans

The Company provides several types of benefits for its employees, including defined benefit and defined contribution pension plans, 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) expense other than the service cost component for pension, black lung, and postretirement life insurance benefits are included in the line item miscellaneous loss, net, in the Consolidated Statements of Operations.

Company Administered Defined Benefit Pension Plans

In connection with the Merger, the Company assumed three qualified non-contributory defined benefit pension plans, which cover certain salaried and non-union hourly employees. The qualified non-contributory defined benefit pension plans are collectively referred to as the "Pension Plans." Benefits are frozen under these plans. 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. One of the Company's frozen qualified non-contributory defined benefit pension plans utilizes a cash balance formula for certain of its participants. The cash balance formula provides guaranteed rates of interest on accumulated balances of either 6% (for balances accumulated prior to 2004) and 4% (on balances accumulated thereafter).

Effective October 1, 2019, two of the qualified non-contributory defined benefit pension plans were amended to offer certain eligible participants the option to elect to receive lump sum benefits as of December 1, 2019, which resulted in a partial plan settlement and the accelerated recognition of a portion of the accumulated other comprehensive loss during the year ended December 31, 2020 and the three months ended December 31, 2019. Refer to the disclosures below for further information on the partial plan settlements.

Annual funding contributions to the Pension Plans are made as recommended by consulting actuaries based upon the ERISA funding standards. Plan assets consist of equity securities, fixed income funds, commingled short-term funds, private equity funds, and a guaranteed insurance contract.

The following tables set forth the plans' accumulated benefit obligations, fair value of plan assets and funded status for the years ended December 31, 2020 and 2019.

(Amounts in thousands except share and per share data)

	Year Ended December 31,	
	2020	2019
Change in benefit obligations:		
Accumulated benefit obligation at beginning of period:	$ 674,439	$ 675,482
Interest cost	18,730	26,564
Actuarial loss [(1)]	72,822	91,287
Benefits paid	(30,916)	(31,371)
Acquisition	—	1,910
Settlement	(11,627)	(89,433)
Accumulated benefit obligation at end of period	$ 723,448	$ 674,439
Change in fair value of plan assets:		
Fair value of plan assets at beginning of period	$ 470,353	$ 494,680
Actual return on plan assets	54,222	87,129
Employer contributions	22,745	9,348
Benefits paid	(30,916)	(31,371)
Settlement	(11,627)	(89,433)
Fair value of plan assets at end of period	$ 504,777	$ 470,353
Funded status	$ (218,671)	$ (204,086)
Accrued benefit cost at end of period [(2)]	$ (218,671)	$ (204,086)

[(1)] For the years ended December 31, 2020 and December 31, 2019, the actuarial loss was primarily attributed to the decrease in the weighted-average discount rate actuarial assumption used in determining the benefit obligations.
[(2)] 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 pension obligations recognized in accumulated other comprehensive loss consisted of the following as of December 31, 2020 and 2019:

	December 31,	
	2020	2019
Net actuarial loss	$ 88,583	$ 46,568

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

	Year Ended December 31,	
	2020	2019
Interest cost	$ 18,730	$ 26,564
Expected return on plan assets	(27,064)	(28,042)
Amortization of net losses	2,012	797
Settlement	1,636	6,224
Net periodic benefit (credit) cost	$ (4,686)	$ 5,543

Other changes in plan assets and benefit obligations recognized in other comprehensive loss are as follows:

	Year Ended December 31,	
	2020	2019
Actuarial loss [(1)]	$ 45,663	$ 30,514
Amortization of net actuarial loss	(2,012)	(797)
Settlement	(1,636)	(6,224)
Total recognized in other comprehensive loss	$ 42,015	$ 23,493

(Amounts in thousands except share and per share data)

(1) For the years ended December 31, 2020 and December 31, 2019, the actuarial loss was primarily attributed to the decrease in the weighted-average discount rate actuarial assumption used in determining the benefit obligations.

The following table presents information applicable to plans with accumulated benefit obligations in excess of plan assets:

	Year Ended December 31, 2020	2019
Projected benefit obligation	$ 723,448	$ 674,439
Accumulated benefit obligation	$ 723,448	$ 674,439
Fair value of plan assets	$ 504,777	$ 470,353

The weighted-average actuarial assumption used in determining the benefit obligations as of December 31, 2020 and 2019 was as follows:

	December 31, 2020	2019
Discount rate	2.62 %	3.36 %

The weighted-average actuarial assumptions used to determine net periodic benefit cost for the years ended December 31, 2020 and 2019 were as follows:

	Year Ended December 31, 2020	2019
Discount rate for benefit obligation	3.35 %	4.33 %
Discount rate for interest cost	2.92 %	4.01 %
Expected return on plan assets	5.90 %	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 return on assets of the Pension Plans is established each year by the Company's Benefits Committee in consultation with the plans' actuaries and outside investment advisors. This rate is determined by taking into consideration the Pension Plans' 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 Plans' assets. For the determination of net periodic benefit cost in 2021, the Company will utilize an expected long-term return on plan assets of 5.80%.

Assets of the Pension Plans 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 2021 and the actual asset allocation as reported at December 31, 2020 are as follows:

	Target Allocation Percentages 2021	Percentage of Plan Assets 2020
Equity securities	60.0 %	47.0 %
Fixed income funds	40.0 %	50.0 %
Other	— %	3.0 %
Total	100.0 %	100.0 %

The asset allocation targets have been set with the expectation that the Pension Plans' assets will fund the expected liabilities within an appropriate level of risk. In determining the appropriate target asset allocations, the Benefits Committee considers the demographics of the Pension Plans' participants, the funding status of each plan, the Company's contribution philosophy, the Company's business and financial profile, and other associated risk factors. The Pension Plans' assets are periodically rebalanced among the major asset categories to maintain the asset allocation within a specified range of the target allocation percentage. In September 2020, the target allocation was adjusted by the Company's Benefits Committee to transition to 60.0% equity securities and 40.0% fixed income funds in approximate 2.0% increments over a 10-month period.

(Amounts in thousands except share and per share data)

The Company expects to contribute $25,541 to the Pension Plans in 2021.

The following represents expected future pension benefit payments for the next ten years:

2021	$	31,178
2022		31,267
2023		31,628
2024		32,149
2025		32,426
2026-2030		162,622
	$	321,270

The fair values of the Company's Pension Plans' assets as of December 31, 2020, 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]	$ 236,405	$ —	$ 236,405	$ —
Fixed income funds:				
Bond fund [2]	253,218	—	253,218	—
Commingled short-term fund [3]	1,405	—	1,405	—
Other types of investments:				
Guaranteed insurance contract	11,454	—	—	11,454
Total	$ 502,482	$ —	$ 491,028	$ 11,454
Receivable [4]	888			
Total assets at fair value	503,370			
Private equity funds measured at net asset value practical expedient [5]	1,407			
Total plan assets	$ 504,777			

[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, 2020, 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, 2020 were as follows:

(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, 2019	$ 11,155
Actual return on plan assets:	
Relating to assets still held at the reporting date	659
Purchases, sales and settlements	(360)
Ending balance, December 31, 2020	$ 11,454

The fair values of the Company's Pension Plans' assets as of December 31, 2019, 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]	$ 182,782	$ —	$ 182,782	$ —
Fixed income funds:				
Bond fund [2]	272,239	—	272,239	—
Commingled short-term fund [3]	1,572	—	1,572	—
Other types of investments:				
Guaranteed insurance contract	11,155	—	—	11,155
Total	$ 467,748	$ —	$ 456,593	$ 11,155
Receivable [4]	1,061			
Total assets at fair value	468,809			
Private equity funds measured at net asset value practical expedient [5]	1,544			
Total plan assets	$ 470,353			

[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, 2019, 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, 2019 were as follows:

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)
	Guaranteed Insurance Contract
Beginning balance, December 31, 2018	$ 10,886
Acquisition	—
Actual return on plan assets:	
Relating to assets still held at the reporting date	644
Purchases, sales and settlements	(375)
Ending balance, December 31, 2019	$ 11,155

The following is a description of the valuation methodologies used for assets measured at fair value:

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 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.

At December 31, 2020, the Company had $124,260 of workers' compensation liability, including a current portion of $10,355 recorded in accrued expenses and other current liabilities, offset by $2,368 and $48,320 of expected insurance receivable recorded in prepaid expenses and other current assets and other non-current assets, respectively, in the Consolidated Balance Sheets. At December 31, 2019, the Company had $136,540 of workers' compensation liability, including a current portion of $11,317 recorded in accrued expenses and other current liabilities, offset by $2,375 and $52,757 of expected insurance receivable recorded in prepaid expenses and other current assets and other non-current assets, respectively, in the Consolidated Balance Sheets.

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, 2020 and 2019 was $7,000 and $10,684, respectively.

Workers' compensation expense for high-deductible insurance plans for the years ended December 31, 2020 and 2019 was $1,275 and $2,333, respectively.

(Amounts in thousands except share and per share data)

The divestiture of the Company's former NAPP operations during the fourth quarter of 2020 (refer to Note 3) resulted in a partial plan settlement of $8,290 and the accelerated recognition of a portion of the accumulated other comprehensive loss of $1,563 during the three months ended December 31, 2020. Refer to the disclosures below for further information on the partial plan settlement.

As a result of the strategic actions impacting certain mines during the three months ended June 30, 2020 (refer to Note 8), black lung obligations were revalued for curtailment and remeasured with an updated discount rate as of May 31, 2020, which resulted in an increase in the liability for black lung obligations of approximately $7,400 with the offset to accumulated other comprehensive loss and a slight increase in net periodic expense to be recognized subsequent to the remeasurement date. Refer to the disclosures below for further information.

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, 2020 and 2019:

	Year Ended December 31,	
	2020	2019
Change in benefit obligation:		
Accumulated benefit obligation at beginning of period	$ 122,788	$ 94,805
Service cost	2,361	2,057
Interest cost	3,240	4,474
Actuarial loss [1]	14,736	11,166
Benefits paid	(7,166)	(6,543)
Acquisition	—	16,829
Curtailment gain	(163)	—
Settlement	(8,290)	—
Accumulated benefit obligation at end of period	$ 127,506	$ 122,788
Change in fair value of plan assets:		
Fair value of plan assets at beginning of period	$ 2,660	$ 2,597
Actual return on plan assets	60	63
Benefits paid	(7,166)	(6,543)
Employer contributions	7,166	6,543
Fair value of plan assets at end of period [2]	2,720	2,660
Funded status	$ (124,786)	$ (120,128)
Accrued benefit cost at end of period	$ (124,786)	$ (120,128)
Summary of accrued benefit cost at end of period:		
Continuing operations	(122,961)	(111,036)
Discontinued operations [3]	(1,825)	(9,092)
Total accrued benefit cost at end of period	$ (124,786)	$ (120,128)

[1] For the years ended December 31, 2020 and December 31, 2019, the actuarial loss was primarily attributed to the decrease in the weighted-average discount rate actuarial assumption used in determining the benefit obligations and the annual updates to demographic information.
[2] 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.
[3] The discontinued operations consisted of activity related to the Company's former NAPP operations. Refer to Note 3.

The table below presents amounts recognized in the Balance Sheets:

(Amounts in thousands except share and per share data)

	December 31,	
	2020	2019
Current liabilities	$ 6,784	$ 7,409
Current liabilities - discontinued operations	26	63
Long-term liabilities	116,177	103,627
Long-term liabilities - discontinued operations	1,799	9,029
	$ 124,786	$ 120,128

Gross amounts related to the black lung obligations recognized in accumulated other comprehensive loss consisted of the following as of December 31, 2020 and 2019:

	December 31,	
	2020	2019
Net actuarial loss	$ 24,042	$ 12,980

The following table details the components of the net periodic benefit cost for black lung obligations:

	Year Ended December 31,	
	2020	2019
Service cost	$ 2,361	$ 2,057
Interest cost	3,240	4,474
Expected return on plan assets	(54)	(65)
Amortization of net actuarial loss	1,942	216
Settlement	1,563	—
Net periodic benefit cost	$ 9,052	$ 6,682
Summary net periodic benefit cost:		
Continuing operations	$ 7,670	$ 6,394
Discontinued operations [(1)]	1,382	288
Total net periodic benefit cost	$ 9,052	$ 6,682

[(1)] The discontinued operations consisted of activity related to the Company’s former NAPP operations. Refer to Note 3.

Other changes in the black lung plan assets and benefit obligations recognized in other comprehensive loss are as follows:

	Year Ended December 31,	
	2020	2019
Actuarial loss [(1)]	$ 14,567	$ 11,512
Amortization of net actuarial loss	(1,942)	(216)
Settlement	(1,563)	—
Total recognized in other comprehensive loss	$ 11,062	$ 11,296

[(1)] For the years ended December 31, 2020 and December 31, 2019, the actuarial loss was primarily attributed to the decrease in the weighted-average discount rate actuarial assumption used in determining the benefit obligations and the annual updates to demographic information.

The weighted-average assumptions related to black lung obligations used to determine the benefit obligation as of December 31, 2020 and 2019 were as follows:

(Amounts in thousands except share and per share data)

	December 31,	
	2020	2019
Discount rate	2.75 %	3.47 %
Federal black lung benefit trend rate	2.00 %	2.00 %
Black lung medical benefit trend rate	5.00 %	5.00 %
Black lung benefit expense inflation rate	2.00 %	2.00 %

The weighted-average assumptions related to black lung obligations used to determine net periodic benefit cost were as follows:

	Year Ended December 31,	
	2020	2019
Discount rate for benefit obligation	3.47 %	4.36 %
Discount rate for service cost	3.56 %	4.54 %
Discount rate for interest cost	2.61 %	3.99 %
Federal black lung benefit trend rate	2.50 %	2.50 %
Black lung medical benefit trend rate	5.00 %	5.00 %
Black lung benefit expense inflation rate	2.00 %	2.50 %
Expected return on plan assets	2.00 %	2.50 %

Estimated future cash payments related to black lung obligations for the next 10 years ending after December 31, 2020 are as follows:

Year ending December 31:		
2021	$	6,810
2022		6,929
2023		7,038
2024		7,112
2025		7,244
2026-2030		20,004
	$	55,137

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 liability for life insurance benefits for certain disabled and non-union retired 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. These obligations are included in the Consolidated Balance Sheet as accrued expenses and other current liabilities and other non-current liabilities.

The following tables set forth the accumulated postretirement life insurance benefit obligations, fair value of plan assets and funded status for the years ended December 31, 2020 and 2019:

(Amounts in thousands except share and per share data)

	December 31, 2020	December 31, 2019
Change in benefit obligation:		
Accumulated benefit obligation at beginning of period	$ 12,341	$ 11,368
Interest cost	337	426
Actuarial loss	420	1,002
Benefits paid	(463)	(455)
Accumulated benefit obligation at end of period	$ 12,635	$ 12,341
Change in fair value of plan assets:		
Benefits paid [1]	(463)	(455)
Employer contributions [1]	463	455
Fair value of plan assets at end of period	$ —	$ —
Funded status	(12,635)	(12,341)
Accrued benefit cost at end of year	$ (12,635)	$ (12,341)
Amounts recognized in the consolidated balance sheets:		
Current liabilities	$ 628	$ 719
Long-term liabilities	12,007	11,622
	$ 12,635	$ 12,341

[1] Amount is comprised of premium payments to commercial life insurance provider.

Gross amounts related to the postretirement life insurance benefit obligations recognized in accumulated other comprehensive income consisted of the following as of December 31, 2020 and 2019:

	December 31, 2020	December 31, 2019
Net actuarial gain	$ (390)	$ (872)

The following table details the components of the net periodic benefit cost for postretirement life insurance benefit obligations:

	December 31, 2020	December 31, 2019
Interest cost	$ 337	$ 426
Amortization of net actuarial gain	(48)	(105)
Settlement	(14)	—
Net periodic benefit cost	$ 275	$ 321

Other changes in the postretirement life insurance plan assets and benefit obligations recognized in other comprehensive income are as follows:

	December 31, 2020	December 31, 2019
Actuarial loss	$ 420	$ 1,002
Amortization of net actuarial gain	48	105
Settlement	14	—
Total recognized in other comprehensive income	$ 482	$ 1,107

(Amounts in thousands except share and per share data)

The weighted-average assumptions related to postretirement life insurance benefit obligations used to determine the benefit obligation as of December 31, 2020 and 2019 was as follows:

	December 31,	
	2020	2019
Discount rate	2.43 %	3.22 %

The weighted-average assumptions related to postretirement life insurance benefit obligations used to determine net periodic benefit cost were as follows:

	Year Ended December 31,	
	2020	2019
Discount rate for benefit obligations	3.22 %	4.21 %
Discount rate for interest cost	2.83 %	3.9 %

Estimated future cash payments related to postretirement life insurance benefit obligations for the next 10 years ending after December 31, 2020 are as follows:

Year ending December 31:	
2021	$ 628
2022	588
2023	586
2024	586
2025	587
2026-2030	2,941
	$ 5,916

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, 2020 and 2019 were $3,613 and $22,102, respectively.

During the second quarter of 2020, the Company's matching contributions under the Contura Energy 401(k) Retirement Savings Plan were suspended due to current market conditions.

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, 2020 and 2019, the Company incurred total expenses of $52,517 and $64,430, respectively, which primarily include claims processed and an estimate for claims incurred but not paid.

(21) 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, 2020, there were 89,780 shares of common stock available for grant under the MIP. The Long-Term Incentive Plan (the "LTIP") is currently authorized for the issuance of awards of up to 1,000,000 shares of common stock, and as of December 31, 2020, there were 349,373 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, 2020, there were no shares of common stock available for grant under the ANR EIP.

As of December 31, 2020, the Company had four types of stock-based awards outstanding: time-based restricted stock units, performance-based restricted stock units, stock options, and performance-based cash awards. Stock-based compensation expense totaled $5,540 and $12,397 for the years ended December 31, 2020 and 2019, respectively. For the years ended December 31, 2020 and 2019, approximately 83% and 76%, 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, 2020, the Company repurchased 43,559 shares of its common stock issued pursuant to awards under the MIP, LTIP and ANR EIP for a total purchase amount of $209, or $4.79 average price paid per share. During the year ended December 31, 2019, the Company repurchased 118,935 shares of its common stock issued pursuant to awards under the MIP, LTIP and ANR EIP for a total purchase amount of $5,159, or $43.37 average price paid per share.

2020 Awards Granted

During the year ended December 31, 2020, the Company granted certain key employees and non-employee directors 402,620 time-based restricted stock units under the MIP and LTIP with a weighted average grant date fair value of $6.17 based on the Company's closing stock price at the trading day before the date of the grant. The awards granted to key employees will vest ratably over a three-year period from date of grant in accordance with the vesting schedule, subject to the participant's continuous service with the Company through each applicable vesting date. The awards granted to non-employee directors will vest on the first to occur of (i) April 30, 2021, (ii) the director's separation from service due to the director's death or physical or mental incapacity to perform his or her usual duties, such condition likely to remain continuously and permanently, as determined by the Company, (iii) a change in control, and (iv) the director's service as a member of the board of directors is terminated as of a date that is after October 31, 2021 but prior to May 1, 2022 for any reason other than removal for cause. Upon vesting and settlement of time-based restricted stock units, the Company issues authorized and unissued shares of the Company's common stock to the recipient.

Additionally, during the year ended December 31, 2020, the Company granted the Chief Executive Officer ("CEO") 302,795 performance-based restricted stock units granted 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. This award was 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 had the potential to be earned from 0% to 200% of target depending on actual results. Upon vesting of these awards, the Company would issue authorized and previously unissued shares of the Company's common stock to the recipient. The 151,398 operational performance-based restricted stock units were valued based on the Company's closing stock price at the trading day before the date of the grant and had a weighted average grant date fair value of $6.36. For the awards with operational performance conditions, the Company reassessed at each reporting date whether achievement of each of the performance conditions was probable and adjusted the accrual of stock-based compensation expense as needed. The 151,397 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 $8.53 based on a Monte Carlo simulation. The Monte Carlo simulation incorporated the assumptions as presented in the following table:

(Amounts in thousands except share and per share data)

Relative performance-based restricted stock units		
Start price (1)	$	7.59
Valuation date stock price (2)	$	6.33
Expected volatility (3)		55.27 %
Risk-free interest rate (4)		1.37 %
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, 2019, 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.

During the first quarter of 2021, the 302,795 performance-based restricted stock units granted under the LTIP were voluntarily forfeited by the CEO in conjunction with an amendment to his employment agreement and the shares were allocated back to the LTIP for future issuance. The amendment also included an amendment to the participant's time-based restricted stock granted under the MIP, such that the ratable vesting initially scheduled to occur on the second and third anniversaries of the award shall instead both occur on the second anniversary of the award.

Additionally, the Company granted certain key employees performance-based cash incentive awards granted under the LTIP with a target award amount of $2,755. 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 target depending on actual performance. 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, 2020, the liability for these awards totaled $643. 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 82.45% based on a Monte Carlo simulation. The Monte Carlo simulation incorporates the assumptions as presented in the following table:

Performance-based cash incentive awards		
Start price (1)	$	7.59
Valuation date stock price (2)	$	6.33
Expected volatility (3)		55.27 %
Risk-free interest rate (4)		1.37 %
Expected dividend yield (5)		— %

(1) The start price for the Company represents the average closing stock price over the twenty trading days ending on December 31, 2019, 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 represents the closing price at each reporting date.
(3) The expected volatility assumption is based on the historical volatility of the price of the Company's stock.
(4) The annual risk-free interest rate equals the yield on the semi-annual zero coupon U.S. Treasury rates converted to continuously compounded rates that have a term equal to the length of the remaining performance measurement period as of the valuation date.
(5) The expected dividend yield represents 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.

(Amounts in thousands except share and per share data)

2019 Awards Granted

During the year ended December 31, 2019, the Company granted certain key employees and non-employee directors 79,474 time-based restricted stock units under the LTIP with a weighted average grant date fair value of $49.47 based on the Company's closing stock price at the trading day before the date of the grant. The awards granted to key employees will either vest ratably over a three-year period or cliff vest in one year from date of grant in accordance with the vesting schedule, subject to the participant's continuous service with the Company through each applicable vesting date. The awards granted to non-employee directors will vest on the first to occur of (i) April 30, 2020, (ii) the director's separation from service due to the director's death or physical or mental incapacity to perform his or her usual duties, such condition likely to remain continuously and permanently, as determined by the Company, and (iii) a change in control. Upon vesting and settlement of time-based restricted stock units, the Company issues authorized and unissued shares of the Company's common stock to the recipient.

Additionally, during the year ended December 31, 2019, the Company granted certain key employees 81,065 relative total shareholder return performance-based restricted stock units under the LTIP that are valued relative to the median stock price performance of a comparator group and had a weighted average grant date fair value of $65.70 based on a Monte Carlo simulation, and 27,042 absolute total shareholder return performance-based restricted stock units under the LTIP that are valued based on the Company's stock price performance with a weighted average grant date fair value of $50.60 based on a Monte Carlo simulation. These awards cliff vest on the third anniversary of the date of the grant, subject to continued employment and the satisfaction of the performance criteria. These awards have the potential to be distributed from 0% to 400% of target for the relative total shareholder return units, and 0% to 200% of target for the absolute total shareholder return units depending on actual results versus the pre-established performance criteria over the three-year period. The Monte Carlo simulations incorporate the assumptions as presented in the following tables:

Relative performance-based restricted stock units		
Start price (1)	$	66.06
Dividend adjusted stock price (2)	$	61.27
Expected volatility (3)		29.98 %
Risk-free interest rate (4)		2.42 %
Expected dividend yield (5)		— %

(1) The start price for the Company represents the average closing stock price over the ten trading days ending on December 31, 2018, assuming dividends distributed during this period were reinvested in additional shares of the Company's stock on the ex-dividend date.
(2) The dividend adjusted stock price represents the closing price on the grant date assuming dividends distributed during the period since December 17, 2018, were reinvested in additional shares of the Company's stock on the ex-dividend date.
(3) The expected volatility assumption is based on the historical volatility of the price of the Company's stock.
(4) The annual risk-free interest rate equals the yield on zero coupon U.S. Treasury Separate Trading of Registered Interest and Principal of Securities ("STRIPS") that have a term equal to the length of the remaining performance measurement period as of the valuation date.
(5) The expected dividend yield represents the investments return to a share of the Company's stock that is not available to the holder of an absolute performance-based restricted stock unit.

Absolute performance-based restricted stock units		
Valuation date stock price	$	61.27
Expected volatility (1)		29.98 %
Risk-free interest rate (2)		2.42 %
Expected dividend yield (3)		— %

(1) The expected volatility assumption is based on the historical volatility of the price of the Company's stock.
(2) The annual risk-free interest rate equals the yield on zero coupon U.S. Treasury STRIPS that have a term equal to the length of the remaining performance measurement period as of the valuation date.
(3) The expected dividend yield represents the investments return to a share of the Company's stock that is not available to the holder of an absolute performance-based restricted stock unit.

(Amounts in thousands except share and per share data)

Restricted Stock

Restricted stock activity for the year ended December 31, 2020 is summarized in the following table:

Restricted stock activity:	**Number of Shares**		**Weighted-Average Grant Date Fair Value**
Non-vested shares outstanding at December 31, 2019	23,598	$	65.55
Granted	—	$	—
Vested	(23,598)	$	65.55
Forfeited or Expired	—	$	—
Non-vested shares outstanding at December 31, 2020	—	$	—

As of December 31, 2020, there was no unrecognized compensation cost related to non-vested restricted stock units.

Restricted Stock Units

Time-Based Restricted Stock Units

Time-based restricted stock unit activity for the year ended December 31, 2020 is summarized in the following table:

Time-based restricted stock unit activity:	**Number of Shares**		**Weighted-Average Grant Date Fair Value**
Non-vested shares outstanding at December 31, 2019	158,082	$	64.84
Granted	402,620	$	6.17
Vested [(1)]	(149,829)	$	45.22
Forfeited or Cancelled	(43,320)	$	21.10
Non-vested shares outstanding at December 31, 2020	367,553	$	13.72

[(1)] Includes 33,508 shares with deferred settlement pursuant to the award agreement.

As of December 31, 2020, there was $1,707 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 1.30 years.

Performance-Based Restricted Stock Units

Relative performance-based restricted stock unit activity for the year ended December 31, 2020 is summarized in the following table:

Relative performance-based restricted stock unit activity:	**Number of Shares**		**Weighted-Average Grant Date Fair Value**
Non-vested shares outstanding at December 31, 2019	31,599	$	65.70
Granted	151,397	$	8.53
Vested [(1)]	(3,864)	$	65.70
Forfeited	(4,929)	$	65.70
Non-vested shares outstanding at December 31, 2020	174,203	$	16.01

[(1)] Includes 3,042 of vested shares due to the employment criteria being satisfied during the period. Until the performance criteria is satisfied, these shares will remain unsettled.

As of December 31, 2020, there was $1,471 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 1.75 years.

(Amounts in thousands except share and per share data)

Absolute performance-based restricted stock unit activity for the year ended December 31, 2020 is summarized in the following table:

Absolute performance-based restricted stock unit activity:	Number of Shares		Weighted-Average Grant Date Fair Value
Non-vested shares outstanding at December 31, 2019	10,549	$	50.60
Granted	—	$	—
Vested [1]	(1,290)	$	50.60
Forfeited	(1,645)	$	50.60
Non-vested shares outstanding at December 31, 2020	7,614	$	50.60

[1] Includes 1,016 of vested shares due to the employment criteria being satisfied during the period. Until the performance criteria is satisfied, these shares will remain unsettled.

As of December 31, 2020, there was $142 of unrecognized compensation cost related to non-vested absolute performance-based restricted stock units which is expected to be recognized as expense over a weighted-average period of 1.11 years.

Operational performance-based restricted stock unit activity for the year ended December 31, 2020 is summarized in the following table:

Operational performance-based restricted stock unit activity:	Number of Shares		Weighted-Average Fair Value
Non-vested shares outstanding at December 31, 2019	—	$	—
Granted	151,398	$	6.36
Vested	—	$	—
Forfeited	—	$	—
Non-vested shares outstanding at December 31, 2020	151,398	$	6.36

As of December 31, 2020, there was $260 of unrecognized compensation cost related to non-vested operational performance-based restricted stock units which is expected to be recognized as expense over a weighted-average period of 2.13 years.

Stock Options

30-Day Volume-Weighted Average Price ("VWAP") Stock Options

30-day VWAP stock option activity for the year ended December 31, 2020 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, 2019	51,359	$	63.45	7.15	$	(2,794)
Exercisable at December 31, 2019	44,356	$	63.03	7.15	$	(2,394)
Granted	—	$	—			
Exercised	—	$	—		$	—
Forfeited or Expired	(28,134)	$	66.13			
Outstanding at December 31, 2020	23,225	$	60.20	6.12	$	(1,134)
Exercisable at December 31, 2020	23,225	$	60.20	6.12	$	(1,134)

[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. During the year ended December 31, 2019, the aggregate intrinsic value of options exercised was $6,305.

(Amounts in thousands except share and per share data)

As of December 31, 2020, there was $0 of unrecognized compensation cost related to the 30-day VWAP stock options.

Fixed Price Stock Options

As December 31, 2020 and 2019, there were no fixed price stock options outstanding or exercisable. During the year ended December 31, 2019, the aggregate intrinsic value of options exercised was $6,879. As of December 31, 2020, there was no unrecognized compensation cost related to the fixed price stock options.

Performance-Based Cash Incentive Awards

Performance-based cash incentive award activity for the year ended December 31, 2020 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, 2019	$ —	— %
Granted	2,755	82.45 %
Vested [1]	(42)	100.00 %
Forfeited	(507)	70.70 %
Non-vested awards outstanding at December 31, 2020	$ 2,206	94.21 %

[1] Vested awards were paid at target dollar value due to the employment criteria being satisfied during the period.

As of December 31, 2020, there was $1,447 of unrecognized compensation cost related to non-vested performance-based cash incentive awards which is expected to be recognized as expense over a weighted-average period of 2.13 years.

(22) Related Party Transactions

There were no material related party transactions for the year ended December 31, 2020.

On June 14, 2019, the Company entered into a Credit Agreement which provides for the Term Loan Credit Facility as provided by a group of existing shareholders as of the agreement date. Refer to Note 15 for additional disclosures.

On July 19, 2019, in association with the Blackjewel Chapter 11 bankruptcy filing, the U.S. Bankruptcy Court approved debtor-in-possession ("DIP") financing of $2,900 with DIP lenders, Highbridge Capital Management, LLC and Whitebox Advisors LLC, shareholders of the Company. The Company entered into an arrangement on July 19, 2019 to purchase the obligations under the DIP financing at the request of the lenders thereunder pursuant to certain terms and conditions.

On September 12, 2019, the Company entered into a common stock repurchase agreement with Whitebox, shareholders of the Company. Refer to Note 13 for additional disclosures.

There were no other material related party transactions for the year ended December 31, 2019.

(23) 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 12 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 $67,992 and $91,879 for the years ended December 31, 2020 and 2019, respectively.

Minimum royalty obligations under coal leases total $15,708, $14,525, $13,633, $11,560, $10,815, and $43,603 for 2021, 2022, 2023, 2024, 2025, and after 2025, respectively.

Other Commitments

The Company has obligations under certain coal purchase agreements that contain minimum quantities to be purchased in 2021 totaling an estimated $44,707. The Company has obligations under certain coal transportation agreements that contain minimum quantities to be shipped during contract periods from 2020 through 2022 with estimated obligations based on remaining tons to be shipped totaling $29 and $338 in 2021 and 2022, respectively. The Company also has obligations under certain equipment purchase agreements that contain minimum quantities to be purchased in 2021 and 2023 totaling $5,008 and $170, respectively.

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.

Refer to Note 3 for disclosures on the Cumberland and PRB Back-to-Back Coal Supply Agreements.

Future Federal Income Tax Refunds

As of December 31, 2020, the Company has recorded $64,160 of current federal income tax receivable and associated interest receivable of $5,213 related to a net operating loss ("NOL") carryback claim. Because the federal government was a creditor in the Alpha Natural Resources, Inc. bankruptcy proceedings, it is possible that the federal government could withhold some or all of the tax refund attributable to the NOL carryback claim and assert a right to set off the tax refund and associated interest receivable against its prepetition bankruptcy claims.

(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 letters of credit, 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 letters of credit to collateralize certain obligations.

(Amounts in thousands except share and per share data)

As of December 31, 2020, the Company had $123,108 in letters of credit outstanding under the Amended and Restated Asset-Based Revolving Credit Agreement. Additionally, as of December 31, 2020, the Company had $14,242 in letters of credit outstanding under the Amended and Restated Letter of Credit Agreement dated November 9, 2018 between ANR, Inc. and Citibank, N.A. and $613 in letters of credit outstanding under the Credit and Security Agreement dated June 30, 2017, and related amendments, between ANR, Inc. and First Tennessee Bank National Association.

As of December 31, 2020, the Company had outstanding surety bonds with a total face amount of $351,596 to secure various obligations and commitments, including $134,162 attributable to discontinued operations. To secure the Company's reclamation-related obligations, the Company currently has $56,311 of collateral supporting these obligations.

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 letters of credit, 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 represent cash deposits primarily invested in interest bearing accounts that are restricted as to withdrawal as required by certain agreements entered into by the Company and provide collateral to secure the following obligations which have been written on the Company's behalf:

	December 31, 2020	December 31, 2019
Workers' compensation and black lung obligations	$ 69,725	$ 51,650
Reclamation-related obligations	8,445	67,868
Financial payments and other performance obligations	17,863	3,006
Contingent revenue obligation escrow	9,311	12,363
Total restricted cash	105,344	134,887
Less current portion [1]	(9,311)	(12,363)
Restricted cash, net of current portion	$ 96,033	$ 122,524

[1] Included within prepaid expenses and other current assets on the Company's Consolidated Balance Sheets.

Restricted investments consist of FDIC insured certificates of deposit, mutual funds, and U.S. treasury bills that are restricted as to withdrawal as required by certain agreements entered into by the Company and provide collateral to secure the following obligations which have been written on the Company's behalf:

	December 31, 2020	December 31, 2019
Workers' compensation obligations	$ 51	$ 613
Reclamation-related obligations	22,233	18,786
Financial payments and other performance obligations	1,484	—
Total restricted investments [1], [2]	$ 23,768	$ 19,399

[1] Included within other non-current assets on the Company's Consolidated Balance Sheets.
[2] As of December 31, 2020 and 2019, respectively, $22,498 and $11,021 are classified as trading securities and $1,270 and $8,378 are classified as held-to-maturity securities.

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:

(Amounts in thousands except share and per share data)

	December 31, 2020	December 31, 2019
Reclamation-related obligations	$ 25,633	$ 8,887
Financial payments and other performance obligations	1,596	—
Other operating agreements	1,018	1,423
Total deposits [1]	$ 28,247	$ 10,310

[1] Included within prepaid expenses and other current assets and 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 is contingent, however, upon the Company's providing collateral of $65,700 to secure certain of its black lung obligations. This proposed collateral requirement is 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. If the Company's appeal is unsuccessful, the Company may be required to provide additional letters of credit 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 collateral. Either of these outcomes could potentially reduce the Company's liquidity.

(d) Legal Proceedings

The Company is 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, 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.

(24) 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, primarily India, Brazil, Turkey, the Netherlands, and Italy. The following table presents additional information on our total revenues and top customers:

(Amounts in thousands except share and per share data)

	Year Ended December 31,	
	2020	2019
Total revenue	$ 1,416,187	$ 2,001,280
Top customer as % of total revenue	16 %	13 %
Top 10 customers as % of total revenue	63 %	59 %
Number of customers exceeding 10% of total revenue	2	2
Number of customers exceeding 10% of total trade accounts receivable, net	3	3
Domestic revenue as % of coal revenue	36 %	39 %
Export revenue as % of coal revenue	64 %	61 %
Countries with export revenue exceeding 10% of total revenue	India, Brazil	India
Met coal as % of coal sales volume	80 %	74 %
Thermal coal as % of coal sales volume	20 %	26 %

(25) 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. As of December 31, 2020, the Company has two reportable segments: Met and CAPP - Thermal. Met consists of five active mines and two preparation plants in Virginia, seventeen active mines and five preparation plants in West Virginia, as well as expenses associated with certain idled/closed mines. CAPP - Thermal consists of one active mine and one preparation plant in West Virginia, as well as expenses associated with certain idled/closed mines. Prior to the fourth quarter of 2020, the Company had three reportable segments: CAPP - Met, CAPP - Thermal, and NAPP. As a result of the divestiture of the Cumberland mining operations (refer to Note 3), the Company re-evaluated its previous conclusions with respect to its segment reporting during the period. To conform to the current period reportable segments presentation, the prior periods have been restated to reflect the change in reportable segments.

In addition to the two reportable segments, the All Other category includes general corporate overhead and corporate assets and liabilities, idle and closed mine costs, and the elimination of certain intercompany activity.

The operating results of these reportable segments are regularly reviewed by the "CODM," who is the Chief Executive Officer of the Company.

Segment operating results and capital expenditures from continuing operations for the year ended December 31, 2020 were as follows:

	Year Ended December 31, 2020			
	Met	CAPP - Thermal	All Other	Consolidated
Total revenues	$ 1,264,496	$ 149,037	$ 2,654	$ 1,416,187
Depreciation, depletion, and amortization	$ 124,060	$ 20,453	$ (4,628)	$ 139,885
Amortization of acquired intangibles, net	$ 12,889	$ (3,775)	$ 100	$ 9,214
Adjusted EBITDA	$ 120,281	$ 9,853	$ (46,732)	$ 83,402
Capital expenditures	$ 111,745	$ 7,106	$ 728	$ 119,579

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

Segment operating results and capital expenditures from continuing operations for the year ended December 31, 2019 were as follows:

	Year Ended December 31, 2019			
	Met	CAPP - Thermal	All Other	Consolidated
Total revenues	$ 1,711,260	$ 286,486	$ 3,534	$ 2,001,280
Depreciation, depletion, and amortization	$ 152,835	$ 57,483	$ 5,439	$ 215,757
Amortization of acquired intangibles, net	$ 10,389	$ (13,578)	$ —	$ (3,189)
Adjusted EBITDA	$ 316,006	$ 11,981	$ (63,883)	$ 264,104
Capital expenditures	$ 140,250	$ 17,545	$ 2,652	$ 160,447

The following table presents a reconciliation of net loss from continuing operations to Adjusted EBITDA for the year ended December 31, 2020:

	Year Ended December 31, 2020			
	Met	CAPP - Thermal	All Other	Consolidated
Net loss from continuing operations	$ (77,519)	$ (52,520)	$ (111,431)	$ (241,470)
Interest expense	(2,014)	6	76,536	74,528
Interest income	(63)	—	(6,964)	(7,027)
Income tax benefit	—	—	(2,164)	(2,164)
Depreciation, depletion and amortization	124,060	20,453	(4,628)	139,885
Non-cash stock compensation expense	289	8	4,600	4,897
Mark-to-market adjustment - acquisition-related obligations	—	—	(8,750)	(8,750)
Accretion on asset retirement obligations	14,214	9,285	3,005	26,504
Asset impairment and restructuring (1)	46,317	36,719	842	83,878
Management restructuring costs (2)	501	5	435	941
Loss on partial settlement of benefit obligations	1,607	(328)	1,687	2,966
Amortization of acquired intangibles, net	12,889	(3,775)	100	9,214
Adjusted EBITDA	$ 120,281	$ 9,853	$ (46,732)	$ 83,402

(1) Asset impairment and restructuring for the year ended December 31, 2020 includes long-lived asset impairments of $80,954 and restructuring expense of $2,924. Refer to Note 8 for further information.
(2) Management restructuring costs are related to severance expense associated with senior management changes during the three months ended March 31, 2020.

(Amounts in thousands except share and per share data)

The following table presents a reconciliation of net income (loss) from continuing operations to Adjusted EBITDA for the year ended December 31, 2019:

	Year Ended December 31, 2019			
	Met	CAPP - Thermal	All Other	Consolidated
Net income (loss) from continuing operations	$ 7,944	$ (97,398)	$ (130,164)	$ (219,618)
Interest expense	(1,209)	23	68,707	67,521
Interest income	(100)	—	(7,147)	(7,247)
Income tax benefit	—	—	(53,287)	(53,287)
Depreciation, depletion and amortization	152,835	57,483	5,439	215,757
Merger-related costs	—	—	1,090	1,090
Non-cash stock compensation expense	1,494	71	10,783	12,348
Mark-to-market adjustment - acquisition-related obligations	—	—	(3,564)	(3,564)
Accretion on asset retirement obligations	9,599	10,929	3,337	23,865
Loss on modification and extinguishment of debt	—	—	26,459	26,459
Asset impairment (1)	15,034	50,993	297	66,324
Goodwill impairment (2)	124,353	—	—	124,353
Cost impact of coal inventory fair value adjustment (3)	4,751	3,458	—	8,209
Gain on assets acquired in an exchange transaction (4)	(9,083)	—	—	(9,083)
Management restructuring costs (5)	—	—	7,720	7,720
Loss on partial settlement of benefit obligations	(1)	—	6,447	6,446
Amortization of acquired intangibles, net	10,389	(13,578)	—	(3,189)
Adjusted EBITDA	$ 316,006	$ 11,981	$ (63,883)	$ 264,104

(1) Asset impairment for the year ended December 31, 2019 includes a long-lived asset impairment of $60,169 related to asset groups recorded within the Met and CAPP - Thermal reporting segments and an asset impairment of $6,155 primarily related to the write-off of prepaid purchased coal as a result of Blackjewel’s Chapter 11 bankruptcy filing on July 1, 2019. Refer to Note 8 for further information.
(2) The goodwill impairment testing as of December 31, 2019 resulted in a goodwill impairment of $124,353 to write down the full carrying value of goodwill. Refer to Note 2 for further information.
(3) The cost impact of the coal inventory fair value adjustment as a result of the Merger was completed during the three months ended June 30, 2019.
(4) During the year ended December 31, 2019, the Company entered into an exchange transaction which primarily included the release of the PRB overriding royalty interest owed to the Company in exchange for met coal reserves which resulted in a gain of $9,083.
(5) Management restructuring costs are related to severance expense associated with senior management changes in the year ended December 31, 2019.

No asset information has been provided for these reportable segments 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 Chief Executive Officer ("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, 2020. Based on this evaluation, our CEO and our CFO concluded that our disclosure controls and procedures were effective as of December 31, 2020.

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 of directors. 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, 2020.

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.

This Annual Report on Form 10-K does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting. As we are a non-accelerated filer, management's report is not subject to attestation by our independent registered public accounting firm pursuant to rules of the SEC that permit us to provide only management's report 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***

None.

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 2022 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 www.alphametresources.com. 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.

Item 11. ***Executive Compensation***

The sections of our Proxy Statement entitled “About our Board of Directors - Director Compensation - 2020 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 - 2020 Summary Compensation Table,” “Executive Compensation - 2020 Grants of Plan-Based Awards,” “Executive Compensation - Outstanding Equity Awards at 2020 Fiscal Year End,” “Executive Compensation - Option Exercises and Stock Vested in 2020,” “Executive Compensation - Nonqualified Deferred Compensation,” “Executive Compensation - Potential Payments Upon Termination or Change in Control,” and “Pay Ratio” are incorporated herein by reference.

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 “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 Accounting Fees and Services***

The sections of our Proxy Statement entitled “Proposal 5 - Ratification of Appointment of Independent Registered Public Accounting Firm - Independent Registered Public Accounting Firm and Fees” and “Proposal 5 - 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. ***Exhibits, 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, 2020 and 2019
- Consolidated Statements of Comprehensive Loss, Years ended December 31, 2020 and 2019
- Consolidated Balance Sheets, December 31, 2020 and 2019
- Consolidated Statements of Cash Flows, Years ended December 31, 2020 and 2019
- Consolidated Statements of Stockholders' Equity, Years ended December 31, 2020 and 2019
- 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.

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: March 15, 2021	By:	*/s/ Charles Andrew Eidson*
	Name:	Charles Andrew Eidson
	Title:	President and 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 Charles Andrew Eidson, and each of them, his or her true and lawful attorneys-in-fact, each with full power of substitution, for him or her 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 each of said attorneys-in-fact or their 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
ls/ David J. Stetson David J. Stetson	March 15, 2021	Chief Executive Officer (Principal Executive Officer)
/s/ Charles Andrew Eidson Charles Andrew Eidson	March 15, 2021	President and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)
/s/ Michael J. Quillen Michael J. Quillen	March 15, 2021	Director
/s/ Kenneth S. Courtis Kenneth S. Courtis	March 15, 2021	Director
/s/ Albert E. Ferrara, Jr. Albert E. Ferrara, Jr.	March 15, 2021	Director
/s/ Elizabeth A. Fessenden Elizabeth A. Fessenden	March 15, 2021	Director
/s/ Daniel D. Smith Daniel D. Smith	March 15, 2021	Director
/s/ Scott D. Vogel Scott D. Vogel	March 15, 2021	Director

Exhibit Index

Exhibit No.	Description of Exhibit
3.1*	Second Amended and Restated Certificate of Incorporation of Contura Energy, Inc. (Incorporated by reference to Exhibit 3.1 to the Registration Statement on Form S-4 of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
3.2*	Third Amended and Restated Bylaws of Contura Energy, Inc. (Incorporated by reference to Exhibit 3.2 on Form 10-K of Contura Energy, Inc. filed on March 18, 2020)
3.3*	Amendment to Second Amended and Restated Certificate of Incorporation of Contura Energy, Inc. (Incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K (File No. 001-38735) filed on January 22, 2021)
3.4*	Amendment to Third Amended and Restated Bylaws of Contura Energy, Inc. (Incorporated by reference to Exhibit 3.2 to the Current Report on Form 8-K (File No. 001-38735) filed on January 22, 2021)
4.1	Specimen Certificate for shares of Common Stock
4.2	Description of Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934
10.1*	Amended and Restated Agreement and Plan of Merger, dated as of September 26, 2018, by and among Contura Energy, Inc., Alpha Natural Resources Holdings, Inc., ANR, Inc., Prime Acquisition I, Inc. and Prime Acquisition II, Inc. (Incorporated by reference to Annex A to the proxy statement contained in the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on October 5, 2018)
10.2*	Asset Purchase Agreement, dated as of December 7, 2017, by among Blackjewel L.L.C., as purchaser, and Contura Coal West, LLC, Contura Wyoming Land, LLC and Contura Coal Sales, LLC, as seller. (Incorporated by reference to Exhibit 2.2 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.3*	Form of Permit Operating Agreement, dated as of December 7, 2017, by among Contura Coal West, LLC, as Transferor and Blackjewel L.L.C., as Transferee (included as Exhibit E to the Asset Purchase Agreement) (Incorporated by reference to Exhibit 2.3 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.4*	Form of Royalty Agreement, dated as of December 7, 2017, by among Blackjewel L.L.C., as purchaser, and Contura Coal West, LLC and Contura Wyoming Land, LLC, as seller. (included as Exhibit G to the Asset Purchase Agreement) (Incorporated by reference to Exhibit 2.4 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.5*	Asset Purchase Agreement, dated July 26, 2016, among Contura Energy, Inc., Alpha Natural Resources, Inc., certain subsidiaries of Alpha Natural Resources, Inc., ANR, Inc. and Alpha Natural Resources, Inc., as sellers' representative. (Incorporated by reference to Exhibit 2.5 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.6*	Credit Agreement dated as of March 17, 2017 among Contura Energy, Inc. as Borrower, Jefferies Finance LLC, as Administrative Agent and Collateral Agent, and the Other Lenders Party Thereto (Jefferies Finance LLC, BMO Capital Markets Corp., Citigroup Global Markets Inc., Credit Suisse Securities (USA) LLC and UBS Securities LLC, as Joint Lead Arrangers and Joint Bookrunners). (Incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.7*	First Amendment to Credit Agreement, dated as of June 13, 2017, to the Credit Agreement, dated as of March 17, 2017 among Contura Energy, Inc. as Borrower, Jefferies Finance LLC, as Administrative Agent and Collateral Agent, and the Other Lenders Party Thereto (Incorporated by reference to Exhibit 10.2 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.8*	Asset-Based Revolving Credit Agreement dated as of April 3, 2017 among Contura Energy, Inc., and certain of its Subsidiaries, as the Borrowers; the Guarantors Party Thereto; Citibank, N.A., as Administrative Agent; Citibank, N.A., as Swingline Lender; Citibank, N.A., BMO Harris Bank N.A. and Credit Suisse AG, Cayman Islands Branch, as L/C Issuers; the Other Lenders Party Thereto and Citigroup Global Markets Inc., BMO Capital Markets Corp. and Credit Suisse Securities (USA) LLC, as Joint Lead Arrangers and Joint Bookrunners. (Incorporated by reference to Exhibit 10.3 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.9*	First Amendment to Asset-Based Revolving Credit Agreement, dated as of June 9, 2017, to the Asset-Based Revolving Credit Agreement dated as of April 3, 2017 among Contura Energy, Inc., and certain of its Subsidiaries, as the Borrowers; the Guarantors Party Thereto; Citibank, N.A., as Administrative Agent; Citibank, N.A., as Swingline Lender; Citibank, N.A., BMO Harris Bank N.A. and Credit Suisse AG, Cayman Islands Branch, as L/C Issuers; the Other Lenders Party Thereto and Citigroup Global Markets Inc., BMO Capital Markets Corp. and Credit Suisse Securities (USA) LLC, as Joint Lead Arrangers and Joint Bookrunners. (Incorporated by reference to Exhibit 10.4 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)

10.10*	Loan Agreement dated as of July 26, 2016 by and between ANR, Inc. as Borrower; the Guarantors Party Thereto and Contura Energy, Inc. as Lender. (Incorporated by reference to Exhibit 10.5 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.11*	Settlement Agreement, dated November 3, 2016 but effective only as of the Settlement Effective Time, by and among Contura Energy, Inc., for itself and on behalf of certain of its subsidiaries; ANR, Inc., for itself and on behalf of certain of its affiliates and Old ANR, Inc. (f/k/a Alpha Natural Resources, Inc.) on behalf of itself and on behalf of all of the sellers in its capacity as sellers' representative. (Incorporated by reference to Exhibit 10.10 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.12*	Reclamation Funding Agreement, dated July 12, 2016, by and among Alpha Natural Resources, Inc., on behalf of itself and its debtor-affiliates; Contura Energy, Inc.; the Illinois Department of Natural Resources; the Kentucky Energy and Environment Cabinet, Department for Natural Resources; the United States Department of the Interior, Office of Surface Mining, Reclamation and Enforcement, in its capacity as the regulatory authority over surface mining operations in the State of Tennessee; the Virginia Department of Mines, Minerals and Energy and the West Virginia Department of Environmental Protection. (Incorporated by reference to Exhibit 10.11 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.13*	Amended Reclamation Funding Agreement dated October 23, 2017, by and among ANR, Lexington Coal Company, LLC, Contura, the Illinois Department of Natural Resources, the Kentucky Energy and Environment Cabinet Department for Natural Resources, the United States Department of the Interior, Office of Surface Mining, Reclamation and Enforcement (in its capacity as the regulatory authority over surface mining operations in the State of Tennessee), the Virginia Department of Mines, Minerals and Energy and the WVDEP. (Incorporated by reference to Exhibit 10.12 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.14*	Settlement Agreement, dated July 12, 2016, by and among Alpha Natural Resources, Inc., on behalf of itself and its debtor-affiliates; Contura Energy, Inc.; Citicorp North America, Inc. and the United States Department of the Interior, on behalf of the Office of Surface Mining, Reclamation and Enforcement, including in its capacity as the regulatory authority over surface mining operations in the State of Tennessee, the Office of Natural Resources Revenue and the Bureau of Land Management. (Incorporated by reference to Exhibit 10.13 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.15*	Permitting and Reclamation Plan Settlement Agreement for the Commonwealth of Kentucky, dated July 12, 2016, by and among Alpha Natural Resources, Inc., on behalf of itself and its debtor-affiliates; Contura Energy, Inc. and the Kentucky Energy and Environment Cabinet, Department for Natural Resources. (Incorporated by reference to Exhibit 10.14 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.16*	Termination Agreement dated October 23, 2017, by and among Alpha Natural Resources, on behalf of itself and its affiliates, Contura Energy, Inc. and the Kentucky Energy and Environmental Cabinet, Department for Natural Resources. (Incorporated by reference to Exhibit 10.15 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.17*	Permitting and Reclamation Plan Settlement Agreement for the State of Illinois, dated July 12, 2016, by and among Alpha Natural Resources, Inc., on behalf of itself and its debtor-affiliates; Contura Energy, Inc. and the Illinois Department of Natural Resources. (Incorporated by reference to Exhibit 10.16 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.18*	First Amendment to Permitting and Reclamation Plan Settlement Agreement for the State of Illinois by and among Alpha Natural Resources, Inc., on behalf of itself and its affiliates, Contura and Illinois Department of Natural Resources. (Incorporated by reference to Exhibit 10.17 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.19*	Permitting and Reclamation Plan Settlement Agreement for the Commonwealth of Virginia, dated July 12, 2016, by and among Alpha Natural Resources, Inc., on behalf of itself and its debtor-affiliates; Contura Energy, Inc. and the Commonwealth of Virginia, Department of Mines, Minerals and Energy. (Incorporated by reference to Exhibit 10.18 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.20*	First Amendment to Permitting and Reclamation Plan Settlement Agreement for the Commonwealth of Virginia dated October 23, 2017, by and among ANR, on behalf of itself and its affiliates, including Old ANR, LLC (f/k/a Alpha Natural Resources, Inc.), Contura and the Virginia Department of Mines, Minerals and Energy. (Incorporated by reference to Exhibit 10.19 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.21*	Permitting and Reclamation Plan Settlement Agreement for the State of West Virginia, dated July 12, 2016, by and among Alpha Natural Resources, Inc., on behalf of itself and its debtor-affiliates; Contura Energy, Inc. and the West Virginia Department of Environmental Protection. (Incorporated by reference to Exhibit 10.20 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)

10.22*	First Amendment to Permitting and Reclamation Plan Settlement Agreement for the State of West Virginia, dated July 25, 2016, by and among Alpha Natural Resources, Inc., on behalf of itself and its debtor-affiliates; Contura Energy, Inc. and the West Virginia Department of Environmental Protection. (Incorporated by reference to Exhibit 10.21 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.23*	Second Amendment to Permitting and Reclamation Plan Settlement Agreement for the State of West Virginia, dated October 23, 2017, by and among Alpha Natural Resources, Inc., on behalf of itself and its debtor-affiliates; Contura Energy, Inc. and the West Virginia Department of Environmental Protection. (Incorporated by reference to Exhibit 10.22 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.24*	Stipulation Regarding Water Treatment Obligations, dated July 12, 2016, by and among Alpha Natural Resources, Inc., on behalf of itself and its debtor-affiliates; Contura Energy, Inc. and the United States. (Incorporated by reference to Exhibit 10.23 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.25*	Amended Stipulation Regarding Water Treatment Obligations, dated October 23, 2017, by and among Alpha Natural Resources, Inc., on behalf of itself and its debtor-affiliates, Lexington Coal Company, LLC, Contura Energy, Inc. and the United States. (Incorporated by reference to Exhibit 10.24 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.26*	Stipulation and Agreed Order dated July 15, 2016 among Alpha Natural Resources, Inc., et al., as Debtors; Citicorp North America, as administrative and collateral agent; Contura Energy, Inc. and the Retiree Settlement Committee. (Incorporated by reference to Exhibit 10.25 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.27*	Stipulation and Agreed Order dated July 6, 2016 among Alpha Natural Resources, Inc., et al., as Debtors; Citicorp North America, as administrative and collateral agent; Contura Energy, Inc. and the UMWA Funds. (Incorporated by reference to Exhibit 10.26 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.28*	Agreement to Fund VEBA, dated July 5, 2016, by and among Contura Energy, Inc., on behalf of itself and as authorized agent for certain of its subsidiaries, and the United Mine Workers of America. (Incorporated by reference to Exhibit 10.27 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.29*	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 10.28 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.30*	Warrant Agreement, dated July 26, 2016, between Contura Energy, Inc., Computershare, Inc. and Computershare Trust Company, N.A. (including Form of Warrant Certificate). (Incorporated by reference to Exhibit 10.29 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.31*†	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)
10.32*†	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)
10.33*†	Form of Contura Energy, Inc. Option Agreement. (Incorporated by reference to Exhibit 10.38 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.34*†	Form of Contura Energy, Inc. Restricted Share Agreement. (Incorporated by reference to Exhibit 10.39 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.35*†	Form of Contura Energy, Inc. Emergence Award Agreement. (Incorporated by reference to Exhibit 10.40 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.36*†	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)
10.37*†	Contura Energy, Inc. Annual Incentive Bonus Program. (Incorporated by reference to Exhibit 10.42 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.38*†	Form of 2018 Long-Term Incentive Plan. (Incorporated by reference to Exhibit 10.45 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.39*	Form of Voting and Support Agreement. (Incorporated by reference to Exhibit 10.46 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on October 5, 2018)

10.40*	Amended and Restated Asset-Based Revolving Credit Agreement, dated as of November 9, 2018, by and among Contura Energy, Inc., as borrower, the other borrowers party thereto, the guarantors party thereto, the lenders from time to time party thereto, Citibank, N.A., as Swingline Lender, Citibank, N.A., Barclays Bank PLC, BMO Harris Bank, N.A., and Credit Suisse AG, Cayman Islands Branch, as L/C Issuers, Citigroup Global Markets Inc., Barclays Bank PLC, BMO Capital Markets Corp. and Credit Suisse Securities (USA) LLC, as Joint Lead Arrangers and Joint Bookrunners, the other lenders party thereto and Citibank, N.A., as administrative agent and collateral agent. (Incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of Contura Energy, Inc. filed on November 13, 2018)
10.41*†	Form of Indemnification Agreement. (Incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K of Contura Energy, Inc. filed on November 13, 2018)
10.42*	Amended and Restated Credit Agreement, dated as of November 9, 2018, by and among Contura Energy, Inc., as the Initial Borrower, the lenders from time to time party thereto, Jefferies Finance LLC, as administrative agent and collateral agent, and Jefferies Finance LLC, Barclays Capital, Inc., BMO Capital Markets Corp., Citigroup Global Markets Inc., Clarksons Platou Securities, Inc. and B. Riley FBR, Inc., as Joint Lead Arrangers and Joint Bookrunners (Incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K of Contura Energy, Inc. filed on November 13, 2018)
10.43†	Contura Energy, Inc. Amended and Restated Non-Employee Director Compensation Policy, dated November 17, 2020
10.44*	Amended and Restated Pledge and Security Agreement, dated as of November 9, 2018, by and among Contura Energy, Inc. and the subsidiaries of Contura Energy, Inc. that are grantors thereunder, and Citibank, N.A., as collateral agent. (Incorporated by reference to Exhibit 10.4 to the Current Report on Form 8-K of Contura Energy, Inc. filed on November 13, 2018)
10.45*	Amended and Restated Pledge and Security Agreement, dated as of November 9, 2018, by and among Contura Energy, Inc. and the subsidiaries of Contura Energy, Inc. that are grantors thereunder, and Jefferies Finance LLC, as collateral agent. (Incorporated by reference to Exhibit 10.5 to the Current Report on Form 8-K of Contura Energy, Inc. filed on November 13, 2018)
10.46*	Amended and Restated Guaranty Agreement, dated as of November 9, 2018, by and among subsidiaries of Contura Energy, Inc. that are guarantors party thereto and Jefferies Finance LLC, as administrative agent. (Incorporated by reference to Exhibit 10.6 to the Current Report on Form 8-K of Contura Energy, Inc. filed on November 13, 2018)
10.47*	Term Sheet dated as of November 6, 2018 by and amongst ANR, Inc., Alpha Natural Resources Holdings, Inc., Contura Energy, Inc. and the West Virginia Department of Environmental Protection (Incorporated by reference to Exhibit 10.7 to the Current Report on Form 8-K of Contura Energy, Inc. filed on November 13, 2018)
10.48*†	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)
10.49*†	Contura Energy, Inc. Form of Restricted Stock Unit Award Agreement (For Employees) (Incorporated by reference to Exhibit 10.9 to the Current Report on Form 8-K of Contura Energy, Inc. filed on November 13, 2018)
10.50*	Commitment Letter, dated as of May 15, 2019, by and among Contura Energy, Inc. and certain of its existing shareholders (Incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of Contura Energy, Inc. filed on May 21, 2019)
10.51*	Amended and Restated Commitment Letter, dated as of May 21, 2019, by and among Contura Energy, Inc. and certain of its existing shareholders (Incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K of Contura Energy, Inc. filed on May 21, 2019)
10.52*	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)
10.53*†	Employment Agreement, dated as of July 29, 2019, by and between Contura Energy, Inc. and David J. Stetson (Incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of Contura Energy, Inc. filed on July 29, 2019)
10.54*	Amended and Restated Term Sheet, dated as of October 18, 2019, by and between Contura Energy, Inc. and Eagle Specialty Materials, LLC (Incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of Contura Energy, Inc. filed on October 21, 2019)
10.55*	Agreement, dated as of October 18, 2019, by and among Contura Coal West, LLC, the United States Department of Interior's Office of Surface Mining, Reclamation and Enforcement, FM Coal, LLC and Eagle Specialty Materials, LLC (Incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K of Contura Energy, Inc. filed on October 21, 2019)
10.56*	Sureties Supplemental Agreement, dated October 18, 2019, by and among Endurance Assurance Corporation, Endurance American Insurance Company, Lexon Insurance Company, Bond Safeguard Insurance Company, Indemnity National Insurance Company, Contura Energy, Inc., Contura Coal West, LLC and Eagle Specialty Materials, LLC (Incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K of Contura Energy, Inc. filed on October 21, 2019)

10.57*†	Form of Incentive Award Agreement (Incorporated by reference to Exhibit 10.1 on Form 10-Q of Contura Energy, Inc. filed on May 11, 2020)
10.58*†	Form of Performance Share Unit Award Agreement (Incorporated by reference to Exhibit 10.2 on Form 10-Q of Contura Energy, Inc. filed on May 11, 2020)
10.59*†	Form of Management Incentive Plan Restricted Unit Award Agreement (Incorporated by reference to Exhibit 10.3 on Form 10-Q of Contura Energy, Inc. filed on May 11, 2020)
10.60*†	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)
10.61*†	Amended and Restated Employment Agreement, dated as of January 26, 2021, by and between Contura Energy, Inc. and David J. Stetson (Incorporated by reference to Exhibit 10.1 on Form 8-K of Contura Energy, Inc. filed on January 29, 2021)
21.1	List of Subsidiaries of Alpha Metallurgical Resources, Inc.
23.1	Consent of RSM US LLP
23.2	Consent of KPMG LLP
23.3	Consent of Marshall Miller & Associates, Inc. dated March 15, 2021
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
101	The following financial information from Alpha Metallurgical Resources, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2020 formatted in Inline XBRL (Extensible Business Reporting Language) includes: (i) Consolidated Statements of Operations, (ii) Consolidated Statements of Comprehensive Loss, (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.

Exhibit 4.1

ALPHA METALLURGICAL RESOURCES, INC.

PO BOX 43004, Providence, RI 02940-3004

MR A SAMPLE
DESIGNATION (IF ANY)
ADD 1
ADD 2
ADD 3
ADD 4

CUSIP			XXXXXX XX X
Holder ID			XXXXXXXXXX
Insurance Value			1,000,000.00
Number of Shares			123456
DTC	12345678	123456789012345	
Certificate Numbers	**Num/No.**	**Denom.**	**Total**
1234567890/1234567890	1	1	1
1234567890/1234567890	2	2	2
1234567890/1234567890	3	3	3
1234567890/1234567890	4	4	4
1234567890/1234567890	5	5	5
1234567890/1234567890	6	6	6
Total Transaction			7

ZQ|CERT#|COY|CLS|RGSTRY|ACCT#|TRANSTYPE|RUN#|TRANS#

COMMON STOCK
PAR VALUE $0.01

COMMON STOCK
THIS CERTIFICATE IS TRANSFERABLE IN CANTON, MA, JERSEY CITY, NJ AND COLLEGE STATION, TX

Certificate Number
ZQ00000000

Shares

ALPHA METALLURGICAL RESOURCES, INC.

INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE

THIS CERTIFIES THAT

MR. SAMPLE & MRS. SAMPLE &
MR. SAMPLE & MRS. SAMPLE

CUSIP 020764 10 6
SEE REVERSE FOR CERTAIN DEFINITIONS

is the owner of

***ZERO HUNDRED THOUSAND
ZERO HUNDRED AND ZERO***

FULLY-PAID AND NON-ASSESSABLE SHARES OF COMMON STOCK OF

Alpha Metallurgical Resources, Inc. (hereinafter called the "Company"), transferable on the books of the Company in person or by duly authorized attorney, upon surrender of this Certificate properly endorsed. This Certificate and the shares represented hereby, are issued and shall be held subject to all of the provisions of the Certificate of Incorporation, as amended, and the By-Laws, as amended, of the Company (copies of which are on file with the Company and with the Transfer Agent), to all of which each holder, by acceptance hereof, assents. This Certificate is not valid unless countersigned and registered by the Transfer Agent and Registrar.

Witness the facsimile seal of the Company and the facsimile signatures of its duly authorized officers.

Chief Executive Officer

CONTURA ENERGY, INC.
SEAL
DELAWARE

Secretary

DATED DD-MMM-YYYY

COUNTERSIGNED AND REGISTERED:
COMPUTERSHARE TRUST COMPANY, N.A.
TRANSFER AGENT AND REGISTRAR,

By ______________________
AUTHORIZED SIGNATURE

1234567

ALPHA METALLURGICAL RESOURCES, INC.

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM	- as tenants in common	UNIF GIFT MIN ACT	- .... Custodian .... (Cust) (Minor)
TEN ENT	- as tenants by the entireties		under Uniform Gifts to Minors Act .... (State)
JT TEN	- as joint tenants with right of survivorship and not as tenants in common	UNIF TRF MIN ACT	- .... Custodian (until age ....) (Cust)
			.... under Uniform Transfers to Minors Act .... (Minor) (State)

Additional abbreviations may also be used though not in the above list.

THE COMPANY WILL FURNISH WITHOUT CHARGE TO EACH SHAREHOLDER WHO SO REQUESTS, A SUMMARY OF THE POWERS, DESIGNATIONS, PREFERENCES AND RELATIVE, PARTICIPATING, OPTIONAL OR OTHER SPECIAL RIGHTS OF EACH CLASS OF STOCK OF THE COMPANY AND THE QUALIFICATIONS, LIMITATIONS OR RESTRICTIONS OF SUCH PREFERENCES AND RIGHTS, AND THE VARIATIONS IN RIGHTS, PREFERENCES AND LIMITATIONS DETERMINED FOR EACH SERIES, WHICH ARE FIXED BY THE CERTIFICATE OF INCORPORATION OF THE COMPANY, AS AMENDED, AND THE RESOLUTIONS OF THE BOARD OF DIRECTORS OF THE COMPANY, AND THE AUTHORITY OF THE BOARD OF DIRECTORS TO DETERMINE VARIATIONS FOR FUTURE SERIES. SUCH REQUEST MAY BE MADE TO THE OFFICE OF THE SECRETARY OF THE COMPANY OR TO THE TRANSFER AGENT. THE BOARD OF DIRECTORS MAY REQUIRE THE OWNER OF A LOST OR DESTROYED STOCK CERTIFICATE, OR HIS LEGAL REPRESENTATIVES, TO GIVE THE COMPANY A BOND TO INDEMNIFY IT AND ITS TRANSFER AGENTS AND REGISTRARS AGAINST ANY CLAIM THAT MAY BE MADE AGAINST THEM ON ACCOUNT OF THE ALLEGED LOSS OR DESTRUCTION OF ANY SUCH CERTIFICATE.

PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE

For value received, ________________________ hereby sell, assign and transfer unto ____________________

____

(PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS, INCLUDING POSTAL ZIP CODE, OF ASSIGNEE)

____

____

____ Shares

of the capital stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

____ Attorney

to transfer the said stock on the books of the within-named Company with full power of substitution in the premises.

Dated: ________________________ 20 __________

Signature: ____

Signature: ____

Notice: The signature to this assignment must correspond with the name as written upon the face of the certificate, in every particular, without alteration or enlargement, or any change whatever.

Signature(s) Guaranteed: Medallion Guarantee Stamp

THE SIGNATURE(S) SHOULD BE GUARANTEED BY AN ELIGIBLE GUARANTOR INSTITUTION (Banks, Stockbrokers, Savings and Loan Associations and Credit Unions) WITH MEMBERSHIP IN AN APPROVED SIGNATURE GUARANTEE MEDALLION PROGRAM, PURSUANT TO S.E.C. RULE 17Ad-15

SECURITY INSTRUCTIONS

THIS IS WATERMARKED PAPER. DO NOT ACCEPT WITHOUT NOTING WATERMARK. HOLD TO LIGHT TO VERIFY WATERMARK.

The IRS requires that the named transfer agent ("we") report the cost basis of certain shares or units acquired after January 1, 2011. If your shares or units are covered by the legislation, and you requested to sell or transfer the shares or units using a specific cost basis calculation method, then we have processed as you requested. If you did not specify a cost basis calculation method, then we have defaulted to the first in, first out (FIFO) method. Please consult your tax advisor if you need additional information about cost basis.

If you do not keep in contact with the issuer or do not have any activity in your account for the time period specified by state law, your property may become subject to state unclaimed property laws and transferred to the appropriate state.

1234567

Exhibit 4.2

DESCRIPTION OF SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

The following is a summary of the material terms of the securities of Alpha Metallurgical Resources, Inc. registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as of February 28, 2021. Our authorized capital stock under our second amended and restated certificate of incorporation, as amended, consists of 50,000,000 shares of common stock, par value $0.01 per share and 5,000,000 shares of preferred stock, par value $0.01 per share. "Alpha", "our" or "the Company" refers to Alpha Metallurgical Resources, Inc.

DESCRIPTION OF ALPHA CAPITAL STOCK

The following is a description of the material terms of our second amended and restated certificate of incorporation, as amended, and third amended and restated bylaws, as amended, in each case as in effect and affecting the rights of our stockholders upon the completion of this offering. We refer you to our second amended and restated certificate of incorporation, and the amendment thereto, and third amended and restated bylaws, and the amendment thereto, copies of which are filed as exhibits to our Annual Report on Form 10-K, of which this exhibit forms a part. We encourage you to read our second amended and restated certificate of incorporation, as amended, and third amended and restated bylaws, as amended, and the applicable provisions of the General Corporation Law of the State of Delaware (the "DGCL") for additional information.

Common Stock

Common stock outstanding. As of February 28, 2021, there were 18,389,139 shares of common stock outstanding, which were held of record by 148 stockholders. All outstanding shares of common stock are fully paid and non-assessable.

Voting rights. The holders of common stock are entitled to one vote per share on all matters to be voted upon by the stockholders.

Dividend rights. Subject to preferences that may be applicable to any outstanding preferred stock, the holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by the board of directors out of funds legally available therefor.

Rights upon liquidation. In the event of our liquidation, dissolution or winding up, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of preferred stock, if any, then outstanding.

Other rights. The holders of common stock have no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock.

Preferred Stock

As of February 28, 2021, there were no shares of preferred stock outstanding. Alpha's board of directors has the authority to issue the preferred stock in one or more series and to fix the designations, powers, preferences and relative, participating, optional or other rights, if any, and the qualifications, limitations or restrictions thereof, if any, with respect to each such class or series of preferred stock and the number of shares constituting each such class or series, and to increase or decrease the number of shares of any such class or series to the extent permitted by Delaware law.

The issuance of preferred stock may have the effect of delaying, deferring or preventing a change in control of Alpha without further action by the stockholders and may adversely affect the voting and other rights of the holders of common stock. At present, Alpha has no plans to issue any of the preferred stock.

Anti-takeover Effects of Certain Provisions of Alpha's Second Amended and Restated Certificate of Incorporation, as Amended, and Third Amended and Restated Bylaws, as Amended

Removal of Directors; Vacancies

Our board of directors currently consists of seven directors. The exact number of directors will be fixed from time to time by resolution of the board. Any director may be removed, with or without cause, at any time by the affirmative vote of shares representing a majority of the shares then entitled to vote at an election of directors. Any vacancy occurring on the board of directors and any newly created directorship shall, unless the board calls a special meeting for which the election of directors is included as business or as otherwise required by law, be filled solely by a majority of the remaining directors in office.

No Cumulative Voting

The DGCL provides that stockholders are not entitled to the right to cumulate votes in the election of directors unless Alpha's second amended and restated certificate of incorporation, as amended, provides otherwise. Alpha's second amended and restated certificate of incorporation, as amended, prohibits cumulative voting.

Calling of Special Meetings of Stockholders

Alpha's second amended and restated certificate of incorporation, as amended, and Alpha's third amended and restated bylaws, as amended, provide that special meetings of Alpha's stockholders may be called only by Alpha's board of directors, subject to the rights of the holders of any series of preferred stock.

No Stockholder Action by Written Consent

Alpha's second amended and restated certificate of incorporation, as amended, and Alpha's third amended and restated bylaws, as amended, provide that any action required or permitted to be taken by Alpha's stockholders must be effected by a duly called annual or special meeting of stockholders and may not be effected by any consent in lieu of a meeting of such stockholders, subject to the rights of the holders of any series of preferred stock.

Advance Notice Requirements for Stockholder Proposals and Director Nominations

Alpha's third amended and restated bylaws, as amended, provide that stockholders seeking to nominate candidates for election as directors or to bring business before an annual meeting of stockholders must provide timely notice of their proposal in writing to Alpha's corporate secretary.

Generally, to be timely, a stockholder's notice must be received at Alpha's principal executive offices not less than 120 days nor more than 150 days prior to the first anniversary date of the date on which the Company first mailed its proxy materials for the previous year's annual meeting. Alpha's third amended and restated bylaws, as amended, also specify requirements as to the form and content of a stockholder's notice. These provisions may impede stockholders' ability to bring matters before an annual meeting of stockholders or make nominations for directors at an annual meeting of stockholders.

Amendments to Alpha's Second Amended and Restated Certificate of Incorporation, as Amended, and Third Amended and Restated Bylaws, as Amended

Alpha's second amended and restated certificate of incorporation, as amended, grants Alpha's board of directors the authority to adopt, amend or repeal Alpha's third amended and restated bylaws, as amended, without a stockholder vote in any manner not inconsistent with the laws of the State of Delaware. Alpha's second amended and restated certificate of incorporation, as amended, and third amended and restated bylaws, as amended, may be amended by the affirmative vote of the holders of at least two-thirds of the shares of common stock.

Limitations on Liability and Indemnification of Officers and Directors

Alpha's second amended and restated certificate of incorporation, as amended, provides that no director will be personally liable to Alpha or its stockholders for monetary damages for breach of fiduciary duty as a director, except as required by applicable law, as in effect from time to time. Currently, Delaware law requires that liability be imposed for the following:

- any breach of the director's duty of loyalty to Alpha or its stockholders;
- any act or omission not in good faith or which involved intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; and
- any transaction from which the director derived an improper personal benefit.

As a result, neither Alpha nor its stockholders have the right, through stockholders' derivative suits on their behalf, to recover monetary damages against a director for breach of fiduciary duty as a director, including breaches resulting from grossly negligent behavior, except in the situations described above.

Alpha’s second amended and restated certificate of incorporation, as amended, provides that, to the fullest extent permitted by law, Alpha will indemnify any officer or director of Alpha against all damages, claims and liabilities arising out of the fact that the person is or was Alpha’s director or officer, or served any other enterprise at Alpha’s request as a director, officer, employee, agent or fiduciary. Alpha will reimburse the expenses, including attorneys’ fees, incurred by a person indemnified by this provision when Alpha receives an undertaking to repay such amounts if it is ultimately determined that the person is not entitled to be indemnified by Alpha. Amending this provision will not reduce Alpha’s indemnification obligations relating to actions taken before an amendment.

Delaware Anti-Takeover Statute

Alpha is subject to Section 203 of the DGCL. Subject to specified exceptions, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years after the date of the transaction in which the person became an interested stockholder. “Business combinations” include mergers, asset sales and other transactions resulting in a financial benefit to the “interested stockholder.” Subject to various exceptions, an “interested stockholder” is a person who together with his or her affiliates and associates, owns, or within three years did own, 15% or more of the corporation’s outstanding voting stock. These restrictions generally prohibit or delay the accomplishment of mergers or other takeover or change-in-control attempts.

Exclusive Forum Provision of Alpha’s Third Amended and Restated Bylaws, as Amended

Under Alpha’s third amended and restated bylaws, as amended, to the fullest extent permitted by law and unless Alpha consents in writing to the selection of an alternative forum, the Court of Chancery of the state of Delaware will be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of Alpha, (ii) any action asserting a claim of breach of a fiduciary duty owed by any Alpha director, officer or other employee to Alpha or its stockholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL or the Alpha charter (including any certificate of designations relating to any class or series of preferred stock) or the Alpha bylaws (in each case, as they may be amended from time to time), or (iv) any action asserting a claim governed by the internal affairs doctrine.

By limiting the ability of third parties and Alpha’s stockholders to file such lawsuits in the forum of their choosing, this exclusive forum provision could increase the costs to a plaintiff of bringing such a lawsuit and could have the effect of deterring such lawsuits, which could include potential takeover-related lawsuits.

Authorized but Unissued Capital Stock

The DGCL does not require stockholder approval for any issuance of authorized shares. However, the listing requirements of the New York Stock Exchange, which would apply so long as Alpha’s common stock is listed on the New York Stock Exchange, require stockholder approval of certain issuances equal to or exceeding 20% of the then-outstanding voting power or then-outstanding number of shares of common stock. These additional shares may be used for a variety of corporate purposes, including future public offerings, to raise additional capital or to facilitate acquisitions.

One of the effects of the existence of unissued and unreserved common stock may be to enable Alpha's board of directors to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of Alpha by means of a merger, tender offer, proxy contest or otherwise, and thereby protect the continuity of our management and possibly deprive the stockholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices.

Transfer Agent and Registrar

Computershare Trust Company, N.A. is the transfer agent and registrar for Alpha's common stock.

Exhibit 10.43

CONTURA ENERGY, INC.
AMENDED AND RESTATED
NON-EMPLOYEE DIRECTOR COMPENSATION POLICY

Amended November 17, 2020

This sets forth the Amended and Restated Non-Employee Director Compensation Policy (the "Policy") of Contura Energy, Inc. (the "Company"), as adopted by the Board of Directors of the Company (the "Board") effective as of May 1, 2020 (the "Effective Date"), and as amended on November 17, 2020. Capitalized terms used but not otherwise defined herein shall have the meanings ascribed to such terms in the Contura Energy, Inc. Long-Term Incentive Plan (the "Plan").

WHEREAS, the Board has determined that it is in the best interests of the Company to establish this Policy to set forth the compensation that will be payable to each member of the Board who is not an employee of the Company or of any subsidiary (each, an "Eligible Director") as consideration for service on the Board.

NOW, THEREFORE, the Board hereby agrees as follows:

1. **General**. The cash compensation and restricted stock unit awards described in this Policy will be paid or be made, as applicable, automatically and without further action of the Board, to each Eligible Director. For the avoidance of doubt, any member of the Board who is not an Eligible Director will not be entitled to cash, equity or any other compensation in connection with service on the Board.

2. **Annual Cash Compensation**

   a. Cash Retainer. Each Eligible Director serving as a member of the Board will receive an annual cash retainer of $100,000 for service on the Board (the "Cash Retainer") for the period beginning on May 1st of a given year and ending on April 30th of the following year (each such period, a "Compensation Year"). An Eligible Director may elect, in accordance with procedures established by the Compensation Committee of the Board (the "Compensation Committee"), to receive one hundred percent (100%) of the Cash Retainer as a restricted stock unit award pursuant to the Plan with a Fair Market Value on the grant date equal to the Cash Retainer (the "Elective RSUs").

   b. Committee Chair Retainers. Eligible Directors are entitled to receive additional annual cash compensation as set forth in this Section 2(b) for service as the chairperson of the Board, as a chairperson of a committee of the Board or as a non-chair committee member (collectively, the "Committee Retainers").

      (i) Chair Compensation. Each Eligible Director is entitled to additional annual cash compensation for service as a chairperson of the Board or of a committee of the Board for service during a Compensation Year, as set forth in the following table:

Position	Annual Chair Compensation
Non-Employee Chairman of the Board	$100,000
Audit Committee Chair	$30,000
Lead Independent Director if Employee is Chairman of the Board	$20,000
Compensation Committee Chair	$20,000
Safety, Health & Environmental Committee Chair	$15,000
Nominating & Corporate Governance Committee Chair	$12,000

      (ii) Committee Member Compensation. Each Eligible Director who serves as a member of a committee of the Board in a non-chair capacity is entitled to additional annual cash compensation for each committee on which such director serves during a Compensation Year, as set forth in the following table:

Committee Member	Annual Member Compensation
Audit Committee	$10,000
Compensation Committee	$10,000
Safety, Health & Environmental Committee	$5,000
Nominating & Corporate Governance Committee	$5,000

3. **Payment Schedule for the Cash Retainer and Meeting Fees; Proration of Cash Retainer**

a. Payment Schedule. The Cash Retainer for each Eligible Director will be paid by the Company in equal quarterly installments during the first calendar month of the Compensation Year quarter to which such amount relates.

b. Acceleration / Proration of Cash Retainer. With respect to any Compensation Year in which an Eligible Director's service as a member of the Board is terminated as of a date that is more than six (6) months after the beginning of but prior to the completion of that Compensation Year for any reason other than death, disability or removal for cause, such Eligible Director will be entitled to receive any portion of the Eligible Director's total Cash Retainer for that Compensation Year, including any Committee Retainer(s) that is unpaid as of the effective date of termination, and this amount shall be paid to the Eligible Director not later than the last day of his or her service as a member of the Board (or, if there was not at least two business days' advance notice regarding such termination, within two business days of such notice). In the event a new Eligible Director is elected or appointed to the Board following the beginning of a Compensation Year, such Eligible Director will be entitled to receive a Cash Retainer for such Compensation Year, which will be prorated based on the date of appointment or election and payable in accordance with the schedule set forth in Section 3(a).

c. New Annual Meeting Date. Notwithstanding Sections 3(a) and 3(b), if the Company establishes a new annual meeting date (the "Annual Meeting Date") which precedes the beginning of a Compensation Year by more than thirty (30) days or follows the beginning of a Compensation Year by more than seventy-five (75) days, the Compensation Year that is in effect as of such Annual Meeting Date shall be terminated, and each Eligible Director at the time of such Annual Meeting Date will be entitled to receive a prorated portion of the Cash Retainer for any partial quarter of service, payable during the calendar month immediately following such Annual Meeting Date. Effective as of the first Annual Meeting Date, the Compensation Year for purposes of the Policy shall be amended so that it commences on the Annual Meeting Date.

4. **Payment Schedule for Committee Retainers**

a. Payment Schedule. Each Eligible Director who is entitled to a Committee Retainer for service as the chairperson of the Board or on a Board committee during a Compensation Year will be paid such Committee Retainer in full during the first calendar month of such Compensation Year. If an Eligible Director is appointed to a new position or committee at a time other than at the beginning of a Compensation Year, any Committee Retainer such Eligible Director is eligible to receive for the applicable Compensation Year as a result of such appointment will be paid in the calendar month immediately following the calendar month in which such appointment occurred.

b. New Annual Meeting Date. If the Company establishes an Annual Meeting Date which does not coincide with the beginning of a Compensation Year, each Eligible Director at the time of such

Annual Meeting Date will be paid any applicable Committee Retainer during the first calendar month of the Compensation Year that commences on such Annual Meeting Date, notwithstanding the fact that such Eligible Director may have received a Committee Retainer within the twelve (12) month period immediately preceding such Annual Meeting Date.

5. **Equity Compensation**

a. RSU Grants. Each Eligible Director serving as a member of the Board at the beginning of a Compensation Year will receive an annual grant of restricted stock units pursuant to the Plan with a Fair Market Value on the date of grant equal to $100,000 (the "Annual RSUs" and, together with any Elective RSUs held by the Eligible Director, the "RSUs"), beginning with the Compensation Year commencing on May 1, 2018. The Annual RSUs will be granted to each Eligible Director as of the first day of the applicable Compensation Year. The RSUs will vest in full on the first to occur of (i) the day before the one-year anniversary of the date of grant (or, in the case of a new Eligible Director who is elected or appointed to the Board following the beginning of a Compensation Year, such other date as provided in the applicable Award Agreement), (ii) the Eligible Director's service as a member of the Board is terminated as of a date that is more than six (6) months after the beginning of but prior to the completion of that Compensation Year for any reason other than removal for cause, and (iii) a Change in Control, subject in each case to the Eligible Director's continuous service with the Company through such date. Unless otherwise elected by an Eligible Director in a Non-Employee Director Restricted Stock Unit Election Form or otherwise provided in the applicable Award Agreement, the shares of the Company's common stock or the Fair Market Value thereof (as determined pursuant to the applicable Award Agreement) in respect of vested RSUs will be delivered (or if settled in cash, will be paid) to the Eligible Director on the earlier of (A) the last day of his or her service as a member of the Board (or, if there was not at least two business days' advance notice regarding such termination, within two business days of such notice on or within two (2) business), and (B) immediately prior to a Change in Control. In the event a new Eligible Director is elected or appointed to the Board following the beginning of a Compensation Year, the Compensation Committee will have the authority to determine, in its sole discretion, whether such Eligible Director is eligible to receive, in connection with such election or appointment, an annual grant of RSUs (or a prorated portion thereof) or a special, one-time grant of restricted stock units pursuant to the Plan. The applicable Award Agreement for a grant of restricted stock units will provide, as determined by the Committee in its sole discretion, whether such restricted stock units may be settled in cash or in shares of the Company's common stock.

New Annual Meeting Date. If the Company establishes an Annual Meeting Date which precedes the beginning of a Compensation Year by more than thirty (30) days or follows the beginning of a Compensation Year by more than seventy-five (75) days, each Eligible Director at the time of such Annual Meeting Date will receive a grant of Annual RSUs on the first date of the Compensation Year beginning on such Annual Meeting Date, which grant will be prorated to reflect that portion of the prior Compensation Year that would have overlapped with the Compensation Year that commences on such Annual Meeting Date.

LIST OF SUBSIDIARIES

Alex Energy, LLC
Alpha American Coal Company, LLC
Alpha American Coal Holding, LLC
Alpha Appalachia Holdings, LLC
Alpha Appalachia Services, LLC
Alpha Coal Resources Company, LLC
Alpha Coal Sales Co., LLC
Alpha Coal West, LLC
Alpha European Marketing, LLC
Alpha European Sales, LLC
Alpha India, LLC
Alpha Land and Reserves, LLC
Alpha Metallurgical Coal Sales, LLC
Alpha Metallurgical Resources, Inc.
Alpha Metallurgical Resources, LLC
Alpha Metallurgical Services, LLC
Alpha Metallurgical Terminal, LLC
Alpha Midwest Holding Company, LLC
Alpha Natural Resources Holdings, Inc.
Alpha Natural Resources International, LLC
Alpha Natural Resources Services, LLC
Alpha Natural Resources, LLC
Alpha PA Coal Terminal, LLC
Alpha Shipping and Chartering, LLC
Alpha Terminal Company, LLC
Alpha Wyoming Land Company, LLC
AMFIRE Holdings, LLC
AMFIRE Mining Company, LLC
AMFIRE, LLC
ANR Second Receivables Funding, LLC
ANR, Inc.
Appalachia Coal Sales Company, LLC
Appalachia Holding Company, LLC
Aracoma Coal Company, LLC
Axiom Excavating and Grading Services, LLC
Bandmill Coal LLC
Bandytown Coal Company
Barbara Holdings Inc.
Barnabus Land Company
Belfry Coal Corporation
Big Bear Mining Company, LLC
Black Castle Mining Company, LLC
Black King Mine Development Co.
Black Mountain Cumberland Resources, LLC
Boone East Development Co., LLC
Brooks Run South Mining, LLC
Castle Gate Holding Company
Clear Fork Coal Company
Coal Gas Recovery II, LLC
Contura CAPP Land, LLC
Contura Excavating & Grading, LLC
Contura Freeport, LLC
Contura Mining Holding, LLC
Crystal Fuels Company
Cumberland Coal Resources, LP
Dehue Coal Company
Delbarton Mining Company, LLC

Delta Mine Holding Company
DFDSTE, LLC
Dickenson-Russell Coal Company, LLC
Dickenson-Russell Contura, LLC
Dickenson-Russell Land and Reserves, LLC
DRIH Corporation
Duchess Coal Company
Eagle Energy, Inc.
Elk Run Coal Company, LLC
Emerald Coal Resources, LP
Enterprise Mining Company, LLC
Esperanza Coal Co., LLC
Foundation Mining, LLC
Foundation PA Coal Company, LLC
Foundation Royalty Company
Freeport Mining, LLC
Freeport Resources Company, LLC
Goals Coal Company
Green Valley Coal Company, LLC
Greyeagle Coal Company
Harlan Reclamation Services LLC
Herndon Processing Company, LLC
Highland Mining Company
Hopkins Creek Coal Company
Independence Coal Company, LLC
Jacks Branch Coal Company
Jay Creek Holding, LLC
Kanawha Energy Company, LLC
Kepler Processing Company, LLC
Kingston Mining, Inc.
Kingwood Mining Company, LLC
Knox Creek Coal Corporation
Laxare, Inc.
Litwar Processing Company, LLC
Logan County Mine Services, Inc.
Logan I, LLC
Logan III, LLC
Long Fork Coal Company, LLC
Lynn Branch Coal Company, Inc.
Maple Meadow Mining Company, LLC
Marfork Coal Company, LLC
Marshall Land LLC
Martin County Coal, LLC
Maxxim Rebuild Co., LLC
Maxxim Shared Services, LLC
Maxxum Carbon Resources, LLC
McDowell-Wyoming Coal Company, LLC
Mill Branch Coal, LLC
New Ridge Mining Company
Neweagle Industries, Inc.
Nicewonder Contracting, Inc.
Nicholas Contura, LLC
North Fork Coal Corporation
Old ANR, LLC
Omar Mining Company, LLC
Paramont Coal Company Virginia, LLC
Paramont Contura, LLC
Paynter Branch Mining, Inc.
Peerless Eagle Coal Co., LLC

Pennsylvania Land Holdings Company, LLC
Pennsylvania Land Resources Holding Company, LLC
Pennsylvania Land Resources, LLC
Pennsylvania Services, LLC
Performance Coal Company, LLC
Peter Cave Mining Company
Pigeon Creek Processing Corporation
Pilgrim Mining Company, Inc.
Pioneer Fuel Corporation
Plateau Mining, LLC
Power Mountain Coal Company, LLC
Power Mountain Contura, LLC
Premium Energy, LLC
Rawl Sales & Processing Co., LLC
Republic Energy, LLC
Resource Development LLC
Resource Insurance Company, Inc.
Resource Land Company LLC
River Processing, LLC
Riverside Energy Company, LLC
Riverton Coal Production, LLC
Road Fork Development Company, LLC
Robinson-Phillips Coal Company
Rockspring Development, Inc.
Rostraver Energy Company
Rum Creek Coal Sales, Inc.
Russell Fork Coal Company
Shannon-Pocahontas Coal Corporation
Shannon-Pocahontas Mining Company
Sidney Coal Company, LLC
Spartan Mining Company, LLC
Stirrat Coal Company, LLC
Sycamore Fuels, Inc.
T. C. H. Coal Co.
Tennessee Consolidated Coal Company
Thunder Mining Company II, LLC
Trace Creek Coal Company
Twin Star Mining, Inc.
Wabash Mine Holding Company
Warrick Holding Company
West Kentucky Energy Company
White Buck Coal Company
Williams Mountain Coal Company
Wyomac Coal Company, Inc.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (No. 333-228293) on Form S-8 of Alpha Metallurgical Resources, Inc. (formerly Contura Energy, Inc.) of our report dated March 15, 2021, relating to the consolidated financial statements of Alpha Metallurgical Resources, Inc., appearing in this Annual Report on Form 10-K of Alpha Metallurgical Resources, Inc. for the year ended December 31, 2020.

/s/ *RSM US LLP*

Atlanta, Georgia
March 15, 2021

Exhibit 23.2

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Alpha Metallurgical Resources, Inc.:

We consent to the incorporation by reference in the registration statement (No. 333-228293) on Form S-8 of Alpha Metallurgical Resources, Inc. (formerly Contura Energy, Inc.) of our report dated March 18, 2020, except for the seventh paragraph in Note 1 and Note 3, as to which the date is March 15, 2021, with respect to the consolidated balance sheet of Alpha Metallurgical Resources, Inc. as of December 31, 2019, the related consolidated statements of operations, comprehensive loss, cash flows, and stockholders' equity for the year then ended, and the related notes, which report appears in the December 31, 2020 annual report on Form 10-K of Alpha Metallurgical Resources, Inc.

/s/ *KPMG LLP*

Richmond, Virginia
March 15, 2021

582 Industrial Park Road, Bluefield, VA 24605-9364 ■ Phone 276.322.5467
www.mma1.com ■ info@mma1.com

CONSENT OF MARSHALL MILLER & ASSOCIATES, INC.

Marshall Miller & Associates, Inc. hereby consents to the use by Alpha Metallurgical Resources, Inc. (the "Company") of the information contained in our report dated February 5, 2021, relating to estimates of certain coal reserves belonging to affiliates of the Company, and to the reference to Marshall Miller & Associates, Inc. as the preparers of the report, in connection with the Company's Annual Report on Form 10-K for the year ended December 31, 2020, and any amendments thereto, and to the incorporation of this information by reference into any other filing made or to be made by the Company with the United States Securities and Exchange Commission, including but not limited to any registration statement or any amendments thereto.

Marshall Miller & Associates, Inc.

By:	*/s/ Steven Keim*
Name:	Steven Keim
Title:	President
Dated:	March 15, 2021

Exhibit 31

CERTIFICATIONS

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER AND PRINCIPAL FINANCIAL OFFICER

Each of the officers below certifies that:

1. I have reviewed this Annual Report on Form 10-K (this "Report") of Alpha Metallurgical Resources, Inc. (the "Registrant");
2. Based on my knowledge, this Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this Report;
3. Based on my knowledge, the financial statements, and other financial information included in this Report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this Report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined by Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;
   b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;
5. The Registrant's other certifying officer and I have disclosed to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):
   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and
   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: March 15, 2021

By: */s/ David J. Stetson*

David J. Stetson
Chief Executive Officer
(Principal Executive Officer)

Date: March 15, 2021

By: */s/ Charles Andrew Eidson*

Charles Andrew Eidson
President and Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

Exhibit 32

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of Alpha Metallurgical Resources, Inc. (the “Registrant”) for the period ended December 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), each of the undersigned officers of the Registrant certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to his knowledge:

1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: March 15, 2021

By: */s/ David J. Stetson*

David J. Stetson
Chief Executive Officer
(Principal Executive Officer)

Date: March 15, 2021

By: */s/ Charles Andrew Eidson*

Charles Andrew Eidson
President and Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

Exhibit 95

Mine Safety and Health Administration Data

Our subsidiaries' mining operations have consistently been recognized with numerous local, state and national awards over the years for outstanding safety performance.

Our behavior-based safety process involves all employees in accident prevention and continuous improvement. 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, frequency of those behaviors, employee feedback and removal of barriers for continuous improvement.

All employees are empowered to champion the safety process. Every person is challenged to identify hazards and initiate corrective actions, ensuring that hazards are addressed in a timely manner.

All levels of the organization are expected to be proactive and commit to perpetual improvement, implementing new safety processes that promote a safe and healthy work environment.

Our subsidiaries operate multiple mining complexes in three states and are regulated by both the U.S. Mine Safety and Health Administration ("MSHA") and state regulatory agencies. As described in more detail in the "Environmental and Other Regulatory Matters" section of our Annual Report on Form 10-K for the year ended December 31, 2020, the Federal Mine Safety and Health Act of 1977, as amended (the "Mine Act"), among other federal and state laws and regulations, imposes stringent safety and health standards on all aspects of mining operations. Regulatory inspections are mandated by these agencies with thousands of inspection shifts at our properties each year. Citations and compliance metrics at each of our mines and coal preparation facilities vary due to the size and type of the operation. We endeavor to conduct our mining and other operations in compliance with all applicable federal, state and local laws and regulations. However, violations occur from time to time. None of the violations identified or the monetary penalties assessed upon us set forth in the tables below has been material.

For purposes of reporting regulatory matters under Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the “Dodd-Frank Act”), we include the following table that sets forth the total number of specific citations and orders and the total dollar value of the proposed civil penalty assessments that were issued by MSHA during the current reporting period for each of our subsidiaries that is a coal mine operator, by individual mine. During the current reporting period, none of the mines operated by our subsidiaries received written notice from MSHA of a pattern of violations under Section 104(e) of the Mine Act.

MSHA Mine ID	Operator	Significant and Substantial Citations Issued (Section 104 of the Mine Act) *Excludes 104(d) citations/orders	Failure to Abate Orders (Section 104(b) of the Mine Act)	Unwarrantable Failure Citations/Orders Issued (Section 104(d) of the Mine Act)	Flagrant Violations (Section 110(b)(2) of the Mine Act)	Imminent Danger Orders Issued (Section 107(a) of the Mine Act)	Dollar Value of Proposed Civil Penalty Assessments (in Thousands) [(1)]	Mining Related Fatalities
3605018	Cumberland Contura, LLC	23	1	2	—	—	$207.35	—
3605466	Emerald Contura, LLC	—	—	—	—	—	$0.62	—
4405270	Paramont Contura, LLC	1	—	—	—	—	$1.66	—
4405311	Dickenson-Russell Contura, LLC	4	—	—	—	—	$5.13	—
4407163	Paramont Contura, LLC	2	—	—	—	—	$1.25	—
4407223	Paramont Contura, LLC	28	—	—	—	—	$44.31	—
4407308	Paramont Contura, LLC	13	—	—	—	—	$26.45	—
4407381	Paramont Contura, LLC	—	—	—	—	—	$0.25	—
4601544	Spartan Mining Company, LLC	31	—	—	—	—	$160.84	—
4603317	Mammoth Coal Co.	—	—	—	—	—	$0.73	—
4604343	Kingston Mining, Inc.	—	—	—	—	—	$3.60	—
4604637	Kepler Processing Company LLC	3	—	—	—	—	$4.02	—
4604669	Rum Creek Coal Sales, Inc.	—	—	—	—	—	$0.12	—
4605086	Bandmill Coal LLC	2	—	—	—	—	$7.52	—
4605649	Dickenson-Russell Contura, LLC	5	—	—	—	—	$3.13	—
4605992	Black Castle Mining Company, LLC	—	—	—	—	—	$2.25	—
4606263	Brooks Run South Mining, LLC	20	—	—	—	—	$48.03	—
4606558	Highland Mining Company	—	—	—	—	—	$0.24	—
4606880	Power Mountain Contura, LLC	—	—	—	—	—	$0.12	—
4607938	Black Castle Mining Company, LLC	—	—	—	—	—	$0.37	—
4608159	Mammoth Coal Co.	1	—	—	—	—	$7.52	—

4608315	Marfork Coal Company, LLC	2	—	—	—	—	$6.16	—
4608374	Marfork Coal Company, LLC	4	—	—	—	—	$4.86	—
4608625	Kingston Mining, Inc.	4	—	—	—	—	$54.39	—
4608787	Nicholas Contura, LLC	13	—	—	—	—	$22.82	—
4608801	Aracoma Coal Company, LLC	22	—	—	—	—	$47.74	—
4608802	Aracoma Coal Company, LLC	11	—	—	—	—	$24.74	—
4608808	Spartan Mining Company, LLC	18	—	—	—	—	$72.60	—
4608837	Marfork Coal Company, LLC	13	—	—	—	—	$12.20	—
4608932	Kingston Mining, Inc.	27	—	—	—	—	$124.65	—
4608977	Alex Energy, LLC	—	—	—	—	—	$0.24	—
4609026	Republic Energy, LLC	2	—	—	—	—	$1.62	—
4609048	Marfork Coal Company, LLC	8	—	—	—	—	$26.67	—
4609054	Republic Energy, LLC	1	—	—	—	—	$5.59	—
4609091	Marfork Coal Company, LLC	45	—	—	—	—	$410.63	—
4609092	Marfork Coal Company, LLC	11	—	—	—	—	$80.78	—
4609114	Republic Energy, LLC	—	—	—	—	—	$0.25	—
4609148	Mammoth Coal Co.	2	—	—	—	—	$2.89	—
4609204	Highland Mining Company	—	—	—	—	—	$1.93	—
4609212	Marfork Coal Company, LLC	23	—	—	—	—	$193.59	—
4609221	Mammoth Coal Co.	13	1	—	—	—	$59.71	—
4609361	Aracoma Coal Company, LLC	10	—	—	—	—	$18.93	—
4609409	Republic Energy, LLC	—	—	—	—	—	$0.25	—
4609475	Republic Energy, LLC	6	—	—	—	—	$8.41	—
4609522	Spartan Mining Company, LLC	25	—	—	—	—	$9.00	—
4609550	Marfork Coal Company, LLC	15	—	—	—	—	$53.31	—
4609574	Aracoma Coal Company, LLC	2	—	—	—	—	$3.38	—

4609575	Aracoma Coal Company, LLC	11	—	—	—	—	$6.16	—

For purposes of reporting regulatory matters under Section 1503(a) of the Dodd-Frank Act, we include the following table that sets forth a list of legal actions pending before the Federal Mine Safety and Health Review Commission, including the Administrative Law Judges thereof, pursuant to the Mine Act, and other required information, for each of our subsidiaries that is a coal mine operator, by individual mine including legal actions and other required information.

Mine ID	Operator Name	MSHA Pending Legal Actions (as of last day of reporting period) [1]	New MSHA Dockets commenced during reporting period	MSHA dockets in which final orders were entered (not appealed) during reporting period	Contests of Citations/Orders referenced in Subpart B, 29 CFR Part 2700	Contests of Proposed Penalties referenced in Subpart C, 29 CFR Part 2700	Complaints for compensation referenced in Subpart D, 29 CFR Part 2700	Complaints for discharge, discrimination, or interference referenced in Subpart E, 29 CFR Part 2700	Applications for temporary relief referenced in Subpart F 29 CFR Part 2700	Appeals of judges' decisions or orders to FMSHRC referenced in Subpart H 29 CFR Part 2700
3605018	Cumberland Contura, LLC	1	4	7	—	1	—	—	—	—
4407223	Paramont Contura, LLC	1	2	1	—	1	—	—	—	—
4407308	Paramont Contura, LLC	—	—	1	—	—	—	—	—	—
4601544	Spartan Mining Company, LLC	1	6	8	—	1	—	—	—	—
4608625	Kingston Mining, Inc.	—	9	10	—	—	—	—	—	—
4608808	Spartan Mining Company, LLC	—	3	1	—	—	—	—	—	—
4608932	Kingston Mining, Inc.	1	7	8	—	1	—	—	—	—
4609048	Marfork Coal Company, LLC	—	3	5	—	—	—	—	—	—
4609091	Marfork Coal Company, LLC	3	13	15	—	3	—	—	—	—
4609092	Marfork Coal Company, LLC	—	4	6	—	—	—	—	—	—
4609212	Marfork Coal Company, LLC	—	8	9	—	—	—	—	—	—
4609550	Marfork Coal Company, LLC	1	4	4	—	1				
4407163	Paramont Contura, LLC	—	1	1	—	—	—	—	—	—
4609221	Mammoth Coal Co.	—	2	2	—	—	—	—	—	—
4609475	Republic Energy LLC	1	3	2	—	1	—	—	—	—
4604343	Kingston Mining Inc.	—	1	1	—	—	—	—	—	—
4606263	Brooks Run South Mining, LLC	—	2	2	—	—	—	—	—	—
3605466	Emerald Contura, LLC	—	—	2	—	—	—	—	—	—

4605086	Bandmill Coal LLC	1	1	—	—	1	—	—	—	—
4608801	Aracoma Coal Company, LLC	—	2	2	—	—	—	—	—	—

(1) The MSHA proposed assessments issued during the current reporting period do not necessarily relate to the citations or orders issued by MSHA during the current reporting period or to the pending Legal Actions reported herein.