UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

☒ **Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the quarterly period ended September 30, 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: 1-13105

Arch Resources, Inc.

(Exact name of registrant as specified in its charter)

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

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

(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class	Trading symbol	Name of each exchange on which registered
Common stock, $.01 par value	ARCH	New York Stock Exchange

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

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

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

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

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes ☒ No ☐

At October 19, 2020 there were 15,147,289 shares of the registrant's common stock outstanding.

TABLE OF CONTENTS

Part I
FINANCIAL INFORMATION

Item 1. Financial Statements.

Arch Resources, Inc. and Subsidiaries
Condensed Consolidated Statements of Operations
(in thousands, except per share data)

	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
	(Unaudited)		(Unaudited)	
Revenues	$ 382,261	$ 619,467	$ 1,107,014	$ 1,744,872
Costs, expenses and other operating				
Cost of sales (exclusive of items shown separately below)	345,539	491,004	1,036,886	1,380,563
Depreciation, depletion and amortization	32,630	30,249	94,105	82,122
Accretion on asset retirement obligations	4,947	5,137	14,939	15,411
Change in fair value of coal derivatives and coal trading activities, net	2,649	1,530	3,263	(19,851)
Selling, general and administrative expenses	21,541	24,566	64,024	73,864
Costs related to proposed joint venture with Peabody Energy	4,423	3,754	15,938	6,772
Asset impairment	163,088	—	163,088	—
Severance costs related to voluntary separation plan	18	—	13,283	—
Gain on property insurance recovery related to Mountain Laurel longwall	—	—	(23,518)	—
(Gain) loss on divestitures	—	—	(1,369)	4,304
Preference Rights Lease Application settlement income	—	(39,000)	—	(39,000)
Other operating income, net	(4,894)	(4,254)	(16,768)	(9,143)
	569,941	512,986	1,363,871	1,495,042
Income (loss) from operations	(187,680)	106,481	(256,857)	249,830
Interest expense, net				
Interest expense	(2,989)	(4,049)	(9,900)	(12,856)
Interest and investment income	459	3,709	3,511	7,940
	(2,530)	(340)	(6,389)	(4,916)
Income (loss) before nonoperating expenses	(190,210)	106,141	(263,246)	244,914
Nonoperating (expenses) income				
Non-service related pension and postretirement benefit (costs) credits	(878)	975	(3,076)	(2,127)
Reorganization items, net	—	—	26	71
	(878)	975	(3,050)	(2,056)
Income (loss) before income taxes	(191,088)	107,116	(266,296)	242,858
Provision for (benefit from) income taxes	379	347	(206)	508
Net income (loss)	$ (191,467)	$ 106,769	$ (266,090)	$ 242,350
Net income (loss) per common share				
Basic earnings (loss) per share	$ (12.64)	$ 6.79	$ (17.57)	$ 14.61
Diluted earnings (loss) per share	$ (12.64)	$ 6.34	$ (17.57)	$ 13.66
Weighted average shares outstanding				
Basic weighted average shares outstanding	15,147	15,736	15,144	16,591
Diluted weighted average shares outstanding	15,147	16,852	15,144	17,744
Dividends declared per common share	$ —	$ 0.45	$ 0.50	$ 1.35

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

Arch Resources, Inc. and Subsidiaries
Condensed Consolidated Statements of Comprehensive Income (Loss)
(in thousands)

	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
	(Unaudited)		(Unaudited)	
Net income (loss)	$ (191,467)	$ 106,769	$ (266,090)	$ 242,350
Derivative instruments				
Comprehensive income (loss) before tax	476	(2,360)	(1,830)	(2,421)
Income tax benefit (provision)	—	—	—	—
	476	(2,360)	(1,830)	(2,421)
Pension, postretirement and other post-employment benefits				
Comprehensive income (loss) before tax	4,164	(4,019)	(12,439)	(1,117)
Income tax benefit (provision)	—	—	—	—
	4,164	(4,019)	(12,439)	(1,117)
Available-for-sale securities				
Comprehensive income (loss) before tax	(255)	(98)	(189)	553
Income tax benefit (provision)	—	—	—	—
	(255)	(98)	(189)	553
Total other comprehensive income (loss)	4,385	(6,477)	(14,458)	(2,985)
Total comprehensive income (loss)	$ (187,082)	$ 100,292	$ (280,548)	$ 239,365

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

Arch Resources, Inc. and Subsidiaries
Condensed Consolidated Balance Sheets
(in thousands, except per share data)

	September 30, 2020 (Unaudited)	December 31, 2019
Assets		
Current assets		
Cash and cash equivalents	$ 156,655	$ 153,020
Short-term investments	63,128	135,667
Restricted cash	13,919	—
Trade accounts receivable (net of $1,303 allowance at September 30, 2020)	127,292	168,125
Other receivables	2,880	21,143
Inventories	143,396	130,898
Other current assets	55,712	97,894
Total current assets	562,982	706,747
Property, plant and equipment, net	964,472	984,509
Other assets		
Equity investments	70,275	105,588
Other noncurrent assets	55,608	70,912
Total other assets	125,883	176,500
Total assets	$ 1,653,337	$ 1,867,756
Liabilities and Stockholders' Equity		
Current Liabilities		
Accounts payable	$ 99,110	$ 133,060
Accrued expenses and other current liabilities	141,021	157,167
Current maturities of debt	25,987	20,753
Total current liabilities	266,118	310,980
Long-term debt	368,278	290,066
Asset retirement obligations	239,614	242,432
Accrued pension benefits	6,108	5,476
Accrued postretirement benefits other than pension	85,642	80,567
Accrued workers' compensation	219,851	215,599
Other noncurrent liabilities	102,080	82,100
Total liabilities	1,287,691	1,227,220
Stockholders' equity		
Common stock, $0.01 par value, authorized 300,000 shares, issued 25,235 and 25,220 shares at September 30, 2020 and December 31, 2019, respectively	252	252
Paid-in capital	744,112	730,551
Retained earnings	457,432	731,425
Treasury stock, 10,088 shares at September 30, 2020 and December 31, 2019, respectively, at cost	(827,381)	(827,381)
Accumulated other comprehensive income (loss)	(8,769)	5,689
Total stockholders' equity	365,646	640,536
Total liabilities and stockholders' equity	$ 1,653,337	$ 1,867,756

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

Arch Resources, Inc. and Subsidiaries
Condensed Consolidated Statements of Cash Flows
(in thousands)

	Nine Months Ended September 30,	
	2020	2019
	(Unaudited)	
Operating activities		
Net income (loss)	$ (266,090)	$ 242,350
Adjustments to reconcile to cash from operating activities:		
Depreciation, depletion and amortization	94,105	82,122
Accretion on asset retirement obligations	14,939	15,411
Deferred income taxes	14,227	13,680
Employee stock-based compensation expense	13,907	17,305
Amortization relating to financing activities	3,189	2,757
Gain on property insurance recovery related to Mountain Laurel longwall	(23,518)	—
Gains on disposals and divestitures, net	(3,460)	(818)
Asset impairment	163,088	—
Preference Rights Lease Application settlement income	—	(39,000)
Changes in:		
Receivables	47,416	(4,622)
Inventories	(12,499)	(46,073)
Accounts payable, accrued expenses and other current liabilities	(50,474)	1,569
Income taxes, net	22,855	32,440
Other	38,229	16,932
Cash provided by operating activities	55,914	334,053
Investing activities		
Capital expenditures	(205,661)	(137,396)
Minimum royalty payments	(1,186)	(1,187)
Proceeds from disposals and divestitures	856	1,799
Purchases of short-term investments	(76,593)	(158,578)
Proceeds from sales of short-term investments	148,670	146,170
Investments in and advances to affiliates, net	(1,549)	(4,810)
Proceeds from property insurance recovery related to Mountain Laurel longwall	23,518	—
Cash used in investing activities	(111,945)	(154,002)
Financing activities		
Payments on term loan due 2024	(2,250)	(2,250)
Proceeds from equipment financing	53,611	—
Proceeds from tax exempt bonds	53,090	—
Net payments on other debt	(19,347)	(12,077)
Debt financing costs	(3,528)	—
Dividends paid	(7,645)	(22,264)
Purchases of treasury stock	—	(232,999)
Payments for taxes related to net share settlement of equity awards	(346)	—
Other	—	30
Cash provided by (used in) financing activities	73,585	(269,560)
Increase (decrease) in cash and cash equivalents, including restricted cash	17,554	(89,509)
Cash and cash equivalents, including restricted cash, beginning of period	153,020	264,937
Cash and cash equivalents, including restricted cash, end of period	$ 170,574	$ 175,428
Cash and cash equivalents, including restricted cash, end of period		
Cash and cash equivalents	$ 156,655	$ 175,428
Restricted cash	13,919	—
	$ 170,574	$ 175,428

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

Arch Resources, Inc. and Subsidiaries
Condensed Consolidated Statements of Stockholders' Equity
(in thousands)

	Common Stock	Paid-In Capital	Retained Earnings	Treasury Stock at Cost	Accumulated Other Comprehensive Income (loss)	Total
			(In thousands)			
Balances, January 1, 2020	$ 252	$ 730,551	$ 731,425	$ (827,381)	$ 5,689	$ 640,536
Dividends on common shares ($0.50/share)	—	—	(7,834)	—	—	(7,834)
Total comprehensive income (loss)	—	—	(25,299)	—	(17,403)	(42,702)
Employee stock-based compensation	—	4,045	—	—	—	4,045
Common stock withheld related to net share settlement of equity awards	—	(281)	—	—	—	(281)
Balances at March 31, 2020	$ 252	$ 734,315	$ 698,292	$ (827,381)	$ (11,714)	$ 593,764
Total comprehensive income (loss)	—	—	(49,324)	—	(1,440)	(50,764)
Employee stock-based compensation	—	4,891	—	—	—	4,891
Common stock withheld related to net share settlement of equity awards	—	(50)	—	—	—	(50)
Dividend Equivalents earned on RSU grants	—	—	(59)	—	—	(59)
Balances at June 30, 2020	$ 252	$ 739,156	$ 648,909	$ (827,381)	$ (13,154)	$ 547,782
Total comprehensive income (loss)	—	—	(191,467)	—	4,385	(187,082)
Employee stock-based compensation	—	4,971	—	—	—	4,971
Common stock withheld related to net share settlement of equity awards	—	(15)	—	—	—	(15)
Dividend Equivalents earned on RSU grants	—	—	(10)	—	—	(10)
Balances at September 30, 2020	$ 252	$ 744,112	$ 457,432	$ (827,381)	$ (8,769)	$ 365,646

Arch Resources, Inc. and Subsidiaries
Condensed Consolidated Statements of Stockholders' Equity
(in thousands)

	Common Stock	Paid-In Capital	Retained Earnings	Treasury Stock at Cost	Accumulated Other Comprehensive Income	Total
			(In thousands)			
Balances, January 1, 2019	$ 250	$ 717,492	$ 527,666	$ (583,883)	$ 43,296	$ 704,821
Dividends on common shares ($0.45/share)	—	—	(8,111)	—	—	(8,111)
Total comprehensive income	—	—	72,741	—	3,094	75,835
Employee stock-based compensation	—	5,651	—	—	—	5,651
Purchase of 872,317 shares of common stock under share repurchase program	—	—	—	(78,249)	—	(78,249)
Balances at March 31, 2019	$ 250	$ 723,143	$ 592,296	$ (662,132)	$ 46,390	$ 699,947
Dividends on common shares ($0.45/share)	—	—	(7,696)	—	—	(7,696)
Total comprehensive income	—	—	62,840	—	398	63,238
Employee stock-based compensation	—	5,822	—	—	—	5,822
Purchase of 697,255 shares of common stock under share repurchase program	—	—	—	(63,392)	—	(63,392)
Warrants exercised	—	31	—	—	—	31
Balances at June 30, 2019	$ 250	$ 728,996	$ 647,440	$ (725,524)	$ 46,788	$ 697,950
Dividends on common shares ($0.45/share)	—	—	(7,281)	—	—	(7,281)
Total comprehensive income	—	—	106,769	—	(6,477)	100,292
Employee stock-based compensation	—	5,833	—	—	—	5,833
Purchase of 1,169,597 shares of common stock under share repurchase program	—	—	—	(91,358)	—	(91,358)
Balances at September 30, 2019	$ 250	$ 734,829	$ 746,928	$ (816,882)	$ 40,311	$ 705,436

Arch Resources, Inc. and Subsidiaries
Notes to Condensed Consolidated Financial Statements
(unaudited)

1. Basis of Presentation

The accompanying unaudited condensed consolidated financial statements include the accounts of Arch Resources, Inc. ("Arch Resources") and its subsidiaries ("Arch" or the "Company"). Unless the context indicates otherwise, the terms "Arch" and the "Company" are used interchangeably in this Quarterly Report on Form 10-Q. The Company's primary business is the production of metallurgical and thermal coal from surface and underground mines located throughout the United States, for sale to steel producers, utility companies, industrial accounts both in the United States and around the world. The Company currently operates mining complexes in West Virginia, Illinois, Wyoming and Colorado. All subsidiaries are wholly-owned. Intercompany transactions and accounts have been eliminated in consolidation.

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States for interim financial reporting and U.S. Securities and Exchange Commission regulations. In the opinion of management, all adjustments, consisting of normal, recurring accruals considered necessary for a fair presentation, have been included. Results of operations for the three and nine months ended September 30, 2020 are not necessarily indicative of results to be expected for the year ending December 31, 2020. These financial statements should be read in conjunction with the audited financial statements and related notes as of and for the year ended December 31, 2019 included in the Company's Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission.

Effective May 15, 2020, Arch Coal, Inc. announced that its name changed to Arch Resources, Inc.

2. Accounting Policies

Recently Adopted Accounting Guidance

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments-Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments," and also issued subsequent amendments to the initial guidance under ASU 2018-19, ASU 2019-04 and ASU 2019-05. The standard modifies the measurement approach for credit losses on financial instruments, including trade receivables, from an incurred loss method to a current expected credit loss method, otherwise known as "CECL." The standard requires the measurement of expected credit losses to be based on relevant information, including historical experience, current conditions and a forecast that is supportable. The Company adopted the standard in the first quarter of 2020, with minimal impact to the Company's financial results.

As part of the adoption, the Company reviewed its portfolio of available-for-sale debt securities in an unrealized loss position, and assessed whether it intends to sell, or it is more likely than not that it will be required to sell before recovery of its amortized cost basis. The Company determined that it currently does not intend to sell these securities before recovery of their amortized cost basis. Additionally, the Company evaluated whether the decline in fair value has resulted from credit losses or other factors by considering the extent to which the fair value is less than amortized cost, any changes to the rating of the security by a rating agency, and adverse conditions specifically related to the security, among other factors. If this assessment indicates that a credit loss exists, the Company compares the present value of the cash flows expected to be collected against the amortized cost basis. A credit loss is recorded if the present value of the cash flows is less than the amortized cost basis, limited by the amount that the fair value is less than the amortized cost basis. Upon adoption, the Company did not record an allowance for credit losses on its available-for-sale debt securities.

Additionally, the Company reviewed its open trade receivables arising from contractual coal sales. As part of its analysis, the Company performs periodic credit reviews of all active customers, reviews all trade receivables greater than 90 days past due, calculates historical loss rates and reviews current payment trends of all customers.

Recent Accounting Guidance Issued Not Yet Effective

In December 2019, the FASB issued ASU 2019-12, "Income Taxes (Topic 740) Simplifying the Accounting for Income Taxes." ASU 2019-12 eliminates certain exceptions related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. The ASU is effective for public companies for fiscal years beginning after December 15, 2020, and interim periods therein with early adoption permitted. The Company is reviewing the provisions of the standard but does not expect a significant impact to the Company's financial statements.

In March 2020, the FASB issued ASU 2020-04, "Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting." The amendments provide optional guidance for a limited time to ease the potential burden in accounting for reference rate reform. The new guidance provides optional expedients and exceptions for applying U.S. GAAP to contracts, hedging relationships and other transactions affected by reference rate reform if certain criteria are met. The amendments apply only to contracts and hedging relationships that reference LIBOR or another reference rate expected to be discontinued due to reference rate reform. These amendments are effective immediately and may be applied prospectively to contract modifications made and hedging relationships entered into or evaluated on or before December 31, 2022. We are currently evaluating our contracts and the optional expedients provided by the new standard.

3. Joint Venture with Peabody Energy

On June 18, 2019, Arch Coal, Inc. (now Arch Resources) entered into a definitive implementation agreement (the "Implementation Agreement") with Peabody Energy Corporation ("Peabody"), to establish a joint venture that would have combined the respective Powder River Basin and Colorado mining operations of Arch Resources and Peabody. Pursuant to the terms of the Implementation Agreement, Arch Resources would have held a 33.5% economic interest, and Peabody would have held a 66.5% economic interest in the joint venture.

On February 26, 2020, the Federal Trade Commission ("FTC") filed an administrative complaint challenging the proposed joint venture alleging the transaction will eliminate competition between Arch Resources and Peabody, the two major competitors in the market for thermal coal in the Southern Powder River Basin and the two largest coal-mining companies in the United States. The FTC filed a temporary restraining order and preliminary injunction in the U.S. District Court for the Eastern District of Missouri, to maintain the status quo pending an administrative trial on the merits.

Between July 14 and July 23, 2020, the U.S. District Court conducted an evidentiary hearing, during which both sides further presented their evidence and arguments. On September 29, 2020, the U.S. District Court upheld the FTC's decision to block the joint venture. Subsequently, the Company and Peabody jointly terminated the joint venture.

The Company has incurred expenses of $4.4 million and $15.9 million for the three and nine months ended September 30, 2020, respectively, associated with the regulatory approval process related to the joint venture. Costs of $3.8 million and $6.8 million were incurred for the three and nine months ended September 30, 2019, respectively.

4. Gain on Property Insurance Recovery Related to Mountain Laurel Longwall

The Company recorded a $23.5 million gain related to a property insurance recovery on the longwall shields at its Mountain Laurel operation during the nine months ended September 30, 2020. As a result of geologic conditions in the final longwall panel, Mountain Laurel was unable to recover 123 of the longwall system's 176 hydraulic shields. All of the cash associated with the insurance recovery was received by the end of the second quarter of 2020.

5. Severance Costs Related To Voluntary Separation Plan

The Company recorded $13.3 million of employee severance expense related to a voluntary separation plan during the nine months ended September 30, 2020. During the first and second quarters of 2020, 53 members of the corporate staff and 201 employees from the Company's thermal operations accepted the voluntary separation package.

6. Divestitures

During the second quarter of 2020, various Dal-Tex and Briar Branch properties in West Virginia were sold to Condor Holdings, LLC. No consideration was received for the sale and a gain of $1.4 million was recorded representing the net liabilities sold.

On September 14, 2017, the Company sold Lone Mountain Processing, LLC and two idled mining companies, Cumberland River Coal LLC and Powell Mountain Energy LLC to Revelation Energy LLC, and recorded a gain on the transaction in that year of $21.3 million. Under the terms of the purchase agreement, Revelation assumed certain traumatic workers compensation claims and pneumoconiosis (occupational disease) benefits. On July 1, 2019, Blackjewel LLC and four affiliates, including Revelation Energy LLC filed for Chapter 11 bankruptcy. As a result of the bankruptcy, the Company recorded a $4.3 million charge for these claims as of September 30, 2019.

7. Preference Rights Lease Application Settlement Income

The Company recorded a $39 million gain during the third quarter of 2019 related to a settlement with the United States Department of Interior over a long-standing dispute, dating back to the 1970's, on the valuation and disposition of Preference Rights Lease Applications that Arch controlled in northwestern New Mexico with a joint venture partner. As part of the settlement, Arch received $67.0 million in the form of royalty credits on its federal coal leases which will be used to settle 50% of the Company's monthly royalty obligations. The Company expects to realize the royalty credits beginning in September 2019 through the next 18-24 months depending on market conditions. Additionally, as part of the settlement, the Company made a one-time payment of $27.0 million during October 2019 to its' partner in the venture for its ownership interest in the underlying mineral reserves, as well as paid $1.0 million in closing fees.

As of September 30, 2020, the Company realized $8.7 million and $25.8 million towards its royalty obligations for the three months and nine months ended September 30, 2020. The Company realized a credit of $5 million towards its royalty obligations during the quarter ended September 30, 2019. The remaining receivable balance outstanding at September 30, 2020 is $27.8 million which is expected to be received over the next three quarters.

8. Asset Impairment

The following table summarizes the amounts reflected on the line "Asset impairment" in the Condensed Consolidated Statements of Operations:

Description		September 30, 2020
		(In thousands)
Coal lands and mineral rights	$	33,197
Plant and equipment		43,197
Deferred development		50,527
Equity Investment		36,167
	$	163,088

The Company's thermal coal segments have experienced reduced demand as a result of sustained low natural gas pricing, reduced utilization and retirement of coal-fired power plants, the increased use of renewable energy sources, and the impact of COVID-19. The reduced demand has led to lower production levels, higher unit costs, and lower realized prices, which have contributed to operating losses at certain of the mine complexes. Further, on September 29, 2020 the U.S. District Court upheld the FTC's decision to block the Company's proposed joint venture. These conditions have resulted in changes to the Company's expectations for projected future volume levels and the overall longevity of the mines. During the third quarter of 2020, the Company determined that these conditions represented indicators of impairment with respect to certain of its long-lived assets or asset groups. As a result, the Company recorded impairment charges during the three and nine months ended September 30, 2020 of $51.8 million related to the Coal Creek Mine within the Powder River Basin Mining segment, $33.5 million related to the Viper Mine within the Other Thermal Segment, $41.6 million related to the West Elk Mine within the Other Thermal segment and $36.2 million related to the Company's equity method investment in Knight Hawk Holdings, LLC. The impairment charges were based upon estimated discounted cash flows that were based on estimates of future sales volumes, coal prices for unpriced volumes, production costs and a risk-adjusted cost of capital. These estimates generally constitute unobservable Level 3 inputs under the fair value hierarchy.

9. Accumulated Other Comprehensive Income (Loss)

The following items are included in accumulated other comprehensive income (loss) ("AOCI"), net of tax:

	Derivative Instruments	Pension, Postretirement and Other Post-Employment Benefits	Available-for-Sale Securities	Accumulated Other Comprehensive Income (loss)
	(In thousands)			
Balance at December 31, 2019	$ (2,564)	$ 8,273	$ (20)	$ 5,689
Unrealized losses	(3,039)	(11,461)	79	(14,421)
Amounts reclassified from AOCI	1,209	(979)	(268)	(37)
Balance at September 30, 2020	$ (4,394)	$ (4,166)	$ (209)	$ (8,769)

The following amounts were reclassified out of AOCI:

Details About AOCI Components	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019	Line Item in the Condensed Consolidated Statement of Operations
	(In thousands)				
Coal hedges	$ 98	$ 2,963	$ 294	$ 5,067	Revenues
Interest rate hedges	(638)	161	(1,502)	1,190	Interest expense
	—	—	—	—	Provision for (benefit from) income taxes
	$ (541)	$ 3,124	$ (1,209)	$ 6,257	Net of tax
Pension, postretirement and other post-employment benefits					
Amortization of actuarial gains (losses), net	$ (138)	$ 2,236	$ 328	$ 2,236	Non-service related pension and postretirement benefit (costs) credits
Amortization of prior service credits	30	—	84	—	Non-service related pension and postretirement benefit (costs) credits
Pension settlement	437	197	567	626	Non-service related pension and postretirement benefit (costs) credits
	—	—	—	—	Provision for (benefit from) income taxes
	$ 329	$ 2,433	$ 979	$ 2,862	Net of tax
Available-for-sale securities	$ 128	$ 35	$ 268	$ 50	Interest and investment income
	—	—	—	—	Provision for (benefit from) income taxes
	$ 128	$ 35	$ 268	$ 50	Net of tax

10. Inventories

Inventories consist of the following:

	September 30, 2020	December 31, 2019
	(In thousands)	
Coal	$ 56,889	$ 46,815
Repair parts and supplies	86,507	84,083
	$ 143,396	$ 130,898

The repair parts and supplies are stated net of an allowance for slow-moving and obsolete inventories of $2.5 million at September 30, 2020 and $2.2 million at December 31, 2019.

11. Investments in Available-for-Sale Securities

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

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

	September 30, 2020				
		Gross Unrealized		Allowance for Credit	Fair
	Cost Basis	Gains	Losses	Losses	Value
			(In thousands)		
Available-for-sale:					
U.S. government and agency securities	$ 15,360	$ —	$ (54)	$ —	$ 15,306
Corporate notes and bonds	47,977	14	(169)	—	47,822
Total Investments	$ 63,337	$ 14	$ (223)	$ —	$ 63,128

	December 31, 2019				
		Gross Unrealized		Allowance for Credit	Fair
	Cost Basis	Gains	Losses	Losses	Value
			(In thousands)		
Available-for-sale:					
U.S. government and agency securities	$ 35,044	$ 1	$ (16)	$ —	$ 35,029
Corporate notes and bonds	100,643	200	(205)	—	100,638
Total Investments	$ 135,687	$ 201	$ (221)	$ —	$ 135,667

The aggregate fair value of investments with unrealized losses that were owned for less than a year was $48.5 million and $72.3 million at September 30, 2020 and December 31, 2019, respectively. The aggregate fair value of investments with unrealized losses that were owned for over a year was $9.6 million and $0.0 million at September 30, 2020 and December 31, 2019, respectively. The unrealized losses in the Company's portfolio at September 30, 2020 are the result of normal market fluctuations. The Company does not currently intend to sell these investments before recovery of their amortized cost base.

The debt securities outstanding at September 30, 2020 have maturity dates ranging from the fourth quarter of 2020 through the first quarter of 2022. The Company classifies its investments as current based on the nature of the investments and their availability to provide cash for use in current operations.

12. Derivatives

Interest rate risk management

The Company has entered into interest rate swaps to reduce the variability of cash outflows associated with interest payments on its variable rate term loan. These swaps have been designated as cash flow hedges. For additional information on these arrangements, see Note 14, “Debt and Financing Arrangements,” in the Condensed Consolidated Financial Statements.

Diesel fuel price risk management

The Company is exposed to price risk with respect to diesel fuel purchased for use in its operations. The Company anticipates purchasing approximately 30 to 35 million gallons of diesel fuel for use in its operations annually. To protect the Company’s cash flows from increases in the price of diesel fuel for its operations, the Company uses forward physical diesel purchase contracts, purchased heating oil call options and New York Mercantile Exchange (“NYMEX”) gulf coast diesel swaps and options. At September 30, 2020, the Company had protected the price on the majority of its expected diesel fuel purchases for the remainder of 2020 with approximately 2 million gallons of heating oil call options with an average strike price of $1.76 per gallon and 2.0 million gallons of NYMEX gulf coast diesel swaps at an average price of approximately $1.05 per gallon. These positions are not designated as hedges for accounting purposes, and therefore, changes in the fair value are recorded immediately to earnings.

Coal price risk management positions

The Company may sell or purchase forward contracts, swaps and options in the over-the-counter coal market in order to manage its exposure to coal prices. The Company has exposure to the risk of fluctuating coal prices related to forecasted, index-priced sales or purchases of coal or to the risk of changes in the fair value of a fixed price physical sales contract. Certain derivative contracts may be designated as hedges of these risks.

At September 30, 2020, the Company held derivatives for risk management purposes that are expected to settle in the following years:

(Tons in thousands)	2020	2021	Total
Coal sales	255	33	288
Coal purchases	238	—	238

The Company has also entered into a minimal quantity of natural gas put options to protect the Company from decreases in natural gas prices, which could impact thermal coal demand. These options are not designated as hedges.

Coal trading positions

The Company may sell or purchase forward contracts, swaps and options in the over-the-counter coal market for trading purposes. The Company is exposed to the risk of changes in coal prices on the value of its coal trading portfolio. The estimated future realization of the value of the trading portfolio is $0.2 million of losses during the remainder of 2020 and $0.3 million of gains during 2021.

Tabular derivatives disclosures

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

The fair value and location of derivatives reflected in the accompanying Condensed Consolidated Balance Sheets are as follows:

Fair Value of Derivatives (In thousands)	September 30, 2020 Asset Derivative	September 30, 2020 Liability Derivative		December 31, 2019 Asset Derivative	December 31, 2019 Liability Derivative	
Derivatives Designated as Hedging Instruments						
Coal	$ 453	$ (355)		$ 1,351	$ (962)	
Derivatives Not Designated as Hedging Instruments						
Heating oil -- diesel purchases	105	—		133	(112)	
Coal -- held for trading purposes	5,128	(4,965)		18,467	(18,940)	
Coal -- risk management	4,736	(2,490)		11,662	(5,856)	
Natural gas	—	—		3	—	
Total	$ 9,969	$ (7,455)		$ 30,265	$ (24,908)	
Total derivatives	$ 10,422	$ (7,810)		$ 31,616	$ (25,870)	
Effect of counterparty netting	(7,757)	7,757		(25,759)	25,759	
Net derivatives as classified in the balance sheets	$ 2,665	$ (53)	$ 2,612	$ 5,857	$ (111)	$ 5,746

		September 30, 2020	December 31, 2019
Net derivatives as reflected on the balance sheets (in thousands)			
Heating oil and coal	Other current assets	$ 2,665	$ 5,857
Coal	Accrued expenses and other current liabilities	(53)	(111)
		$ 2,612	$ 5,746

The Company had a current liability representing cash collateral owed to a margin account for derivative positions primarily related to coal derivatives of $2.1 million and $4.4 million at September 30, 2020 and December 31, 2019, respectively. These amounts are not included with the derivatives presented in the table above and are included in “accrued expenses and other current liabilities” in the accompanying Condensed Consolidated Balance Sheets.

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

Derivatives used in Cash Flow Hedging Relationships (in thousands)

Three Months Ended September 30,

		Gain (Loss) Recognized in Other Comprehensive Income 2020	Gain (Loss) Recognized in Other Comprehensive Income 2019	Gains (Losses) Reclassified from Other Comprehensive Income into Income 2020	Gains (Losses) Reclassified from Other Comprehensive Income into Income 2019
Coal sales	(1)	$ (25)	$ 225	$ (569)	$ 2,963
Coal purchases	(2)	25	(34)	471	—
Totals		$ —	$ 191	$ (98)	$ 2,963

Derivatives Not Designated as Hedging Instruments (in thousands)

Three Months Ended September 30,

		Gain (Loss) Recognized 2020	Gain (Loss) Recognized 2019
Coal trading — realized and unrealized	(3)	$ 1	$ (127)
Coal risk management — unrealized	(3)	(2,650)	(1,417)
Natural gas trading— realized and unrealized	(3)	—	14
Change in fair value of coal derivatives and coal trading activities, net total		$ (2,649)	$ (1,530)
Coal risk management— realized	(4)	$ 2,593	$ 3,216
Heating oil — diesel purchases	(4)	$ (184)	$ (1,670)

Location in statement of operations:

(1) — Revenues
(2) — Cost of sales
(3) — Change in fair value of coal derivatives and coal trading activities, net
(4) — Other operating (income) expense, net

Derivatives used in Cash Flow Hedging Relationships (in thousands)

Nine Months Ended September 30,

		Gain (Loss) Recognized in Other Comprehensive Income		Gains (Losses) Reclassified from Other Comprehensive Income into Income	
		2020	2019	2020	2019
Coal sales	(1)	$ 574	$ 9,472	$ (1,471)	$ 5,750
Coal purchases	(2)	(570)	(940)	1,177	(686)
Totals		$ 4	$ 8,532	$ (294)	$ 5,064

Derivatives Not Designated as Hedging Instruments (in thousands)

Nine Months Ended September 30,

		Gain (Loss) Recognized 2020	Gain (Loss) Recognized 2019
Coal trading— realized and unrealized	(3)	$ 222	$ (1,228)
Coal risk management— unrealized	(3)	(3,561)	21,145
Natural gas trading — realized and unrealized	(3)	76	(66)
Change in fair value of coal derivatives and coal trading activities, net total		$ (3,263)	$ 19,851
Coal risk management — realized	(4)	$ 6,950	$ (2,076)
Heating oil — diesel purchases	(4)	$ (889)	$ (2,402)

Location in statement of operations:

(1) — Revenues
(2) — Cost of sales
(3) — Change in fair value of coal derivatives and coal trading activities, net
(4) — Other operating (income) expense, net

No ineffectiveness or amounts excluded from effectiveness testing relating to the Company's cash flow hedging relationships were recognized in the results of operations in the three and nine month periods ended September 30, 2020 and 2019.

Based on fair values at September 30, 2020, amounts on derivative contracts designated as hedge instruments in cash flow hedges to be reclassified from other comprehensive income into earnings during the next 12 months are gains of approximately $0.1 million.

13. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following:

	September 30, 2020	December 31, 2019
	(In thousands)	
Payroll and employee benefits	$ 44,348	$ 50,929
Taxes other than income taxes	60,953	69,061
Interest	799	133
Workers' compensation	15,282	16,119
Asset retirement obligations	9,827	10,366
Other	9,812	10,559
	$ 141,021	$ 157,167

14. Debt and Financing Arrangements

	September 30, 2020	December 31, 2019
	(In thousands)	
Term loan due 2024 ($289.5 million face value)	$ 288,730	$ 290,825
Tax Exempt Bonds	53,090	—
Other	59,359	25,007
Debt issuance costs	(6,914)	(5,013)
	394,265	310,819
Less: current maturities of debt	25,987	20,753
Long-term debt	$ 368,278	$ 290,066

Term Loan Facility

In 2017, the Company entered into a senior secured term loan credit agreement (the "Credit Agreement") in an aggregate principal amount of $300 million (the "Term Loan Debt Facility") with Credit Suisse AG, Cayman Islands Branch, as administrative agent and collateral agent, and the other financial institutions from time to time party thereto (collectively, the "Lenders"). The Term Loan Debt Facility was issued at 99.50% of the face amount and will mature on March 7, 2024. The term loans provided under the Term Loan Debt Facility (the "Term Loans") are subject to quarterly principal amortization payments in an amount equal to $750,000.

During 2018, the Company entered into the Second Amendment (the "Second Amendment") to its Credit Agreement. The Second Amendment reduced the interest rate on its Term Loan Debt Facility to, at the option of Arch Resources, either (i) the London interbank offered rate ("LIBOR") plus an applicable margin of 2.75%, subject to a 1.00% LIBOR floor, or (ii) a base rate plus an applicable margin of 1.75%. The LIBOR floor remains at 1.00%. There is no change to the maturities as a result of the Second Amendment.

The Term Loan Debt Facility is guaranteed by all existing and future wholly owned domestic subsidiaries of the Company (collectively, the "Subsidiary Guarantors" and, together with Arch Resources, the "Loan Parties"), subject to customary exceptions, and is secured by first priority security interests on substantially all assets of the Loan Parties, including 100% of the voting equity interests of directly owned domestic subsidiaries and 65% of the voting equity interests of directly owned foreign subsidiaries, subject to customary exceptions.

The Company has the right to prepay the Term Loan at any time, and from time to time, in whole or in part without premium or penalty, upon written notice, except that any prepayment of the Term Loan that bear interest at the LIBOR Rate other than at the end of the applicable interest periods therefore shall be made with reimbursement for any funding losses and redeployment costs of the Lenders resulting therefrom.

The Term Loan Debt Facility is subject to certain usual and customary mandatory prepayment events, including 100% of net cash proceeds of (i) debt issuances (other than debt permitted to be incurred under the terms of the Term Loan Debt Facility) and (ii) non-ordinary course asset sales or dispositions, subject to customary thresholds, exceptions and reinvestment rights.

The Term Loan Debt Facility contains customary affirmative covenants and representations.

The Term Loan Debt Facility also contains customary negative covenants, which, among other things, and subject to certain exceptions, include restrictions on (i) indebtedness, (ii) liens, (iii) liquidations, mergers, consolidations and acquisitions, (iv) disposition of assets or subsidiaries, (v) affiliate transactions, (vi) creation or ownership of certain subsidiaries, partnerships and joint ventures, (vii) continuation of or change in business, (viii) restricted payments, (ix) prepayment of subordinated and junior lien indebtedness, (x) restrictions in agreements on dividends, intercompany loans and granting liens on the collateral, (xi) loans and investments, (xii) sale and leaseback transactions, (xiii) changes in organizational documents and fiscal year and (xiv) transactions with respect to bonding subsidiaries. The Term Loan Debt Facility does not contain any financial maintenance covenants.

The Term Loan Debt Facility contains customary events of default, subject to customary thresholds and exceptions, including, among other things, (i) nonpayment of principal and nonpayment of interest and fees, (ii) a material inaccuracy of a representation or warranty at the time made, (iii) a failure to comply with any covenant, subject to customary grace periods in the case of certain affirmative covenants, (iv) cross-events of default to indebtedness of at least $50 million, (v) cross-events of default to surety, reclamation or similar bonds securing obligations with an aggregate face amount of at least $50 million, (vi) uninsured judgments in excess of $50 million, (vii) any loan document shall cease to be a legal, valid and binding agreement, (viii) uninsured losses or proceedings against assets with a value in excess of $50 million, (ix) certain ERISA events, (x) a change of control or (xi) bankruptcy or insolvency proceedings relating to the Company or any material subsidiary of the Company.

Accounts Receivable Securitization Facility

On September 30, 2020, the Company amended and extended its existing trade accounts receivable securitization facility provided to Arch Receivable Company, LLC, a special-purpose entity that is a wholly owned subsidiary of Arch Resources ("Arch Receivable") (the "Extended Securitization Facility"), which supports the issuance of letters of credit and requests for cash advances. The amendment to the Extended Securitization Facility reduces the size of the facility from $160 million to $110 million of borrowing capacity and extended the maturity date to September 29, 2023. Additionally, the amendment eliminated the provision that accelerated maturity upon liquidity falling below a specified level. Pursuant to the Extended Securitization Facility, Arch Receivable also agreed to a revised schedule of fees payable to the administrator and the providers of the Extended Securitization Facility.

Under the Extended Securitization Facility, Arch Receivable, Arch Resources and certain of Arch Resources's subsidiaries party to the Extended Securitization Facility have granted to the administrator of the Extended Securitization Facility a first priority security interest in eligible trade accounts receivable generated by such parties from the sale of coal and all proceeds thereof. As of September 30, 2020, letters of credit totaling $50.0 million were outstanding under the facility with $34.5 million available for borrowings.

Inventory-Based Revolving Credit Facility

On September 30, 2020, the Company and certain of its subsidiaries amended the senior secured inventory-based revolving credit facility in an aggregate principal amount of $50 million (the "Inventory Facility") with Regions Bank ("Regions") as administrative agent and collateral agent, as lender and swingline lender (in such capacities, the "Lender") and as letter of credit issuer. Availability under the Inventory Facility is subject to a borrowing base consisting of (i) 85% of the net orderly liquidation value of eligible coal inventory, (ii) the lesser of (x) 85% of the net orderly liquidation value of eligible parts and supplies inventory and (y) 35% of the amount determined pursuant to clause (i), and (iii) 100% of Arch Resources's Eligible Cash (defined in the Inventory Facility), subject to reduction for reserves imposed by Regions.

The amendment of the Inventory Facility extended the maturity of the facility to September 29, 2023; eliminated the provision that accelerated maturity upon liquidity falling below a specified level; and reduced the minimum liquidity requirement from $175 million to $100 million. Additionally, the amendment includes provisions that reduce the advance rates for coal inventory and parts and supplies, depending on Liquidity.

Revolving loan borrowings under the Inventory Facility bear interest at a per annum rate equal to, at the option of Arch Resources, either the base rate or the London interbank offered rate plus, in each case, a margin ranging from 2.50% to 3.50% (in the case of LIBOR loans) and 1.00% to 1.50% (in the case of base rate loans) determined using a Liquidity-based grid. Letters of credit under the Inventory Facility are subject to a fee in an amount equal to the applicable margin for LIBOR loans, plus customary fronting and issuance fees.

All existing and future direct and indirect domestic subsidiaries of Arch Resources, subject to customary exceptions, will either constitute co-borrowers under or guarantors of the Inventory Facility (collectively with Arch Resources, the "Loan Parties"). The Inventory Facility is secured by first priority security interests in the ABL Priority Collateral (defined in the Inventory Facility) of the Loan Parties and second priority security interests in substantially all other assets of the Loan Parties, subject to customary exceptions (including an exception for the collateral that secures the Extended Securitization Facility).

Arch Resources has the right to prepay borrowings under the Inventory Facility at any time and from time to time in whole or in part without premium or penalty, upon written notice, except that any prepayment of such borrowings that bear interest at the LIBOR rate other than at the end of the applicable interest periods therefore shall be made with reimbursement for any funding losses and redeployment costs of the Lender resulting therefrom.

The Inventory Facility is subject to certain usual and customary mandatory prepayment events, including non-ordinary course asset sales or dispositions, subject to customary thresholds, exceptions (including exceptions for required prepayments under Arch Resources's term loan facility) and reinvestment rights.

The Inventory Facility contains certain customary affirmative and negative covenants; events of default, subject to customary thresholds and exceptions; and representations, including certain cash management and reporting requirements that are customary for asset-based credit facilities. The Inventory Facility also includes a requirement to maintain Liquidity equal to or exceeding $100 million at all times. As of September 30, 2020, letters of credit totaling $29.2 million were outstanding under the facility with $14.8 million available for borrowings.

Equipment Financing

On March 4, 2020, the Company entered into an equipment financing arrangement accounted for as debt. The Company received $53.6 million in exchange for conveying an interest in certain equipment in operation at its Leer Mine and entered into a master lease arrangement for that equipment. The financing arrangement contains customary terms and events of default and provides for 48 monthly payments with an average interest rate of 6.34% maturing on March 4, 2024. Upon maturity, all interests in the subject equipment will revert back to the Company.

Tax Exempt Bonds

On July 2, 2020, the West Virginia Economic Development Authority (the "Issuer") issued $53.1 million aggregate principal amount of Solid Waste Disposal Facility Revenue Bonds (Arch Resources Project), Series 2020 (the "Bonds") pursuant to an Indenture of Trust dated as of June 1, 2020 (the "Indenture") between the Issuer and Citibank, N.A., as trustee (the "Trustee"). The proceeds of the Bonds were loaned to the Company pursuant to a Loan Agreement dated as of June 1, 2020 between the Issuer and Arch. The Bonds are payable solely from payments to be made by the Company under the Loan Agreement as evidence by a Note from the Company to the Trustee. The proceeds of the Bonds were used to finance certain costs of the acquisition, construction, reconstruction, and equipping of solid waste disposal facilities at the Company's Leer South development, and for capitalized interest and certain costs related to issuance of the Bonds.

The Bonds will bear interest payable each January 1 and July 1, commencing January 1, 2021, at an interest rate of 5% and have a final maturity of July 1, 2045; however, the Bonds are subject to mandatory tender on July 1, 2025 at a purchase price equal to 100% of the principal amount of the Bonds, plus accrued interest to July 1, 2025.

The Bonds are subject to redemption (i) in whole or in part at any time on or after January 1, 2025 at the option of the Issuer, upon the Company's direction at a redemption price of par, plus interest accrued to the redemption date; and (ii) at par plus interest accrued to the redemption date from certain excess Bond proceeds as further described in the Indenture.

The Company's obligations under the Loan Agreement are (i) except as otherwise described below, secured by first priority liens on and security interests in substantially all of the Company's and Subsidiary Guarantors' real property and other assets, subject to certain customary exceptions and permitted liens, and in any event excluding our accounts receivable and inventory; and (ii) jointly and severally guaranteed by the Subsidiary Guarantors, subject to customary exceptions.

The collateral securing the Company's obligations under the Loan Agreement is substantially the same as the collateral securing the obligations under the Term Loan Debt Facility other than with respect to variances in certain real property collateral. The real property securing the Company's obligations under the Loan Agreement includes a subset of the real property collateral securing the obligations under the Term Loan Debt Facility and includes only mortgages on substantially all of the Company's revenue generating metallurgical coal real property and assets, including its mining complexes at Leer, Leer South, Mountain Laurel and Beckley in West Virginia. The Company is required to provide additional mortgages in the future to secure its obligations under the Loan Agreement due to the joint venture with Peabody not consummating.

The Loan Agreement contains certain affirmative covenants and representations, including but not limited to: (i) maintenance of a rating on the Bonds; (ii) maintenance of proper books of records and accounts; (iii) agreement to add additional guarantors to guarantee our obligations under the Loan Agreement in certain circumstances; (iv) procurement of customary insurance; and (v) preservation of legal existence and certain rights, franchises, licenses and permits. The Loan Agreement also contains certain customary negative covenants, which, among other things, and subject to certain exceptions, include restrictions on (i) release of collateral securing our obligations under the Loan Agreement; (ii) mergers and consolidations and disposition of assets, and (iii) restrictions on actions that may jeopardize the tax-exempt status of the Bonds.

The Loan Agreement contains customary events of default, subject to customary thresholds and exceptions, including, among other things, (i) nonpayment of principal, purchase price, interest and other fees (subject to certain cure periods), (ii) bankruptcy or insolvency proceedings relating to us; (iii) material inaccuracy of a representation or warranty at the time made, (iv) cross-events of default to indebtedness of at least $50 million, (v) cross defaults to the Indenture, the guaranty related to the Bonds or any related security documents.

As of September 30, 2020, Arch has received $38.1 million of the total bonds issues. The remaining $13.9 is held in trust and is recorded on the balance sheet as restricted cash. The remainder of the funds will be released as qualified expenditures are made over the next several quarters.

Interest Rate Swaps

The Company has entered into a series of interest rate swaps to fix a portion of the LIBOR interest rate within the term loan. The interest rate swaps qualify for cash flow hedge accounting treatment and as such, the change in the fair value of the interest rate swaps is recorded on the Company's Condensed Consolidated Balance Sheet as an asset or liability with the effective portion of the gains or losses reported as a component of accumulated other comprehensive income and the ineffective portion reported in earnings. As interest payments are made on the term loan, amounts in accumulated other comprehensive income will be reclassified into earnings through interest expense to reflect a net interest on the term loan equal to the effective yield of the fixed rate of the swap plus 2.75% which is the spread on the revised LIBOR term loan. In the event that an interest rate swap is terminated prior to maturity, gains or losses in accumulated other comprehensive income will remain deferred and be reclassified into earnings in the periods which the hedged forecasted transaction affects earnings.

Below is a summary of the Company's outstanding interest rate swap agreements designated as hedges as of September 30, 2020:

Notional Amount (in millions)	Effective Date	Fixed Rate	Receive Rate	Expiration Date
$ 200.0	June 30, 2020	2.249 %	1-month LIBOR	June 30, 2021
$ 100.0	June 30, 2021	2.315 %	1-month LIBOR	June 30, 2023

The fair value of the interest rate swaps at September 30, 2020 is a liability of $4.5 million, which is recorded within Other noncurrent liabilities, with the offset to accumulated other comprehensive income on the Company's Condensed Consolidated Balance Sheet. The Company realized $0.6 million and $1.5 million of losses during the three and nine months ended September 30, 2020, respectively, related to settlements of the interest rate swaps which was recorded to interest expense on the Company's Condensed Consolidated Statement of Operations. The interest rate swaps are classified as Level 2 within the fair value hierarchy.

15. Income Taxes

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
	(In thousands)			
Income tax provision at statutory rate	$ (40,128)	$ 22,494	$ (55,922)	$ 51,000
Percentage depletion allowance	2,242	(6,347)	(3,358)	(14,111)
State taxes, net of effect of federal taxes	(2,695)	1,825	(4,197)	3,668
Change in valuation allowance	40,734	(19,120)	61,115	(42,925)
Current expense associated with uncertain tax positions	226	1,495	3,327	2,932
AMT sequestration refund	—	—	(1,171)	—
Other, net	—	—	—	(56)
Provision for (benefit from) income taxes	$ 379	$ 347	$ (206)	$ 508

During the second quarter of 2020, the Company received a $37.4 million refund from the Internal Revenue Service consisting of all the remaining refundable alternative minimum tax (AMT) credits and related interest. A FIN48 reserve has been established for $13.3 million, which represents 40% of the portion of the refund that is subject to audit risk.

16. Fair Value Measurements

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

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

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

- Level 3 is defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions. These include the Company's commodity option contracts (coal, natural gas and heating oil) valued using modeling techniques, such as Black-Scholes, that require the use of inputs, particularly volatility, that are rarely observable. Changes in the unobservable inputs would not have a significant impact on the reported Level 3 fair values at September 30, 2020.

The table below sets forth, by level, the Company's financial assets and liabilities that are recorded at fair value in the accompanying Condensed Consolidated Balance Sheet:

	September 30, 2020			
	Total	Level 1	Level 2	Level 3
	(In thousands)			
Assets:				
Investments in marketable securities	$ 63,128	$ 15,306	$ 47,822	$ —
Derivatives	2,665	2,560	105	—
Total assets	$ 65,793	$ 17,866	$ 47,927	$ —
Liabilities:				
Derivatives	$ 4,545	$ —	$ 4,545	$ —

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

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

	Three Months Ended September 30, 2020	Nine Months Ended September 30, 2020
	(In thousands)	
Balance, beginning of period	$ 33	$ 61
Realized and unrealized losses recognized in earnings, net	(33)	(1,158)
Purchases	—	1,235
Issuances	—	(138)
Settlements	—	—
Ending balance	$ —	$ —

Net unrealized losses of $0.0 million and $0.2 million were recognized in the Condensed Consolidated Statement of Operations within Other operating income, net during the three and nine months ended September 30, 2020, respectively, related to Level 3 financial instruments held on September 30, 2020.

Fair Value of Long-Term Debt

At September 30, 2020 and December 31, 2019, the fair value of the Company's debt, including amounts classified as current, was $356.7 million and $308.0 million, respectively. Fair values are based upon observed prices in an active market, when available, or from valuation models using market information, which fall into Level 2 in the fair value hierarchy.

17. Earnings per Common Share

The Company computes basic net income (loss) per share using the weighted average number of common shares outstanding during the period. Diluted net income (loss) per share is computed using the weighted average number of common shares and the effect of potentially dilutive securities outstanding during the period. Potentially dilutive securities may consist of warrants, restricted stock units or other contingently issuable shares. The dilutive effect of outstanding warrants, restricted stock units and other contingently issuable shares is reflected in diluted earnings per share by application of the treasury stock method. The weighted average share impact of warrants and restricted stock units that were excluded from the calculation of diluted shares due to the Company incurring a net loss for the three and nine month periods ending September 30, 2020 were 178,333 shares and 169,555 shares, respectively.

	Three Months Ended September 30,		Nine Months Ended September 30,	
(In Thousands)	2020	2019	2020	2019
Weighted average shares outstanding:				
Basic weighted average shares outstanding	15,147	15,736	15,144	16,591
Effect of dilutive securities	—	1,116	—	1,153
Diluted weighted average shares outstanding	15,147	16,852	15,144	17,744

The following table provides the basis for basic and diluted earnings per share by reconciling the denominators of the computations:

18. Workers Compensation Expense

The Company is liable under the Federal Mine Safety and Health Act of 1969, as subsequently amended, to provide for pneumoconiosis (occupational disease) benefits to eligible employees, former employees and dependents. The Company currently provides for federal claims principally through a self-insurance program. The Company is also liable under various state workers' compensation statutes for occupational disease benefits. The occupational disease benefit obligation represents the present value of the actuarially computed present and future liabilities for such benefits over the employees' applicable years of service.

In October 2019, the Company filed an application with the Office of Workers' Compensation Programs ("OWCP") within the Department of Labor for reauthorization to self-insure federal black lung benefits. In February 2020, the Company received a reply from the OWCP confirming Arch's status to remain self-insured contingent upon posting additional collateral of $71.1 million within 30 days of receipt of the letter. The Company is currently appealing the ruling from the OWCP and has received an extension to self-insure during the appeal process. The Company is evaluating alternatives to self-insurance, including the purchase of commercial insurance to cover these claims.

In addition, the Company is liable for workers' compensation benefits for traumatic injuries which are calculated using actuarially-based loss rates, loss development factors and discounted based on a risk free rate. Traumatic workers' compensation claims are insured with varying retentions/deductibles, or through state-sponsored workers' compensation programs.

Workers' compensation expense consists of the following components:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
		(In thousands)		
Self-insured occupational disease benefits:				
Service cost	$ 1,892	$ 1,670	$ 5,674	$ 5,008
Interest cost[1]	1,398	1,354	4,196	4,062
Net amortization[1]	297	—	892	—
Total occupational disease	$ 3,587	$ 3,024	$ 10,762	$ 9,070
Traumatic injury claims and assessments	2,030	2,088	6,312	6,642
Total workers' compensation expense	$ 5,617	$ 5,112	$ 17,074	$ 15,712

(1) In accordance with the adoption of ASU 2017-07, "Compensation-Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost," these costs are recorded within Nonoperating expenses in the Condensed Consolidated Statement of Operations on the line item "Non-service related pension and postretirement benefit costs."

19. Employee Benefit Plans

The following table details the components of pension benefit costs (credits):

	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
	(In thousands)			
Interest cost[1]	$ 1,255	$ 1,922	$ 4,342	$ 6,439
Expected return on plan assets[1]	(2,022)	(2,699)	(6,333)	(8,146)
Pension settlement[1]	(437)	(197)	(567)	(626)
Amortization of prior service costs (credits) [1]	(27)	4	(83)	4
Net benefit credit	$ (1,231)	$ (970)	$ (2,641)	$ (2,329)

The following table details the components of other postretirement benefit costs:

	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
	(In thousands)			
Service cost	$ 104	$ 120	$ 316	$ 360
Interest cost[1]	543	876	1,849	2,629
Amortization of other actuarial losses (gains)[1]	(160)	(2,236)	(1,219)	(2,236)
Net benefit cost (credit)	$ 487	$ (1,240)	$ 946	$ 753

(1) In accordance with the adoption of ASU 2017-07, "Compensation-Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost," these costs are recorded within Nonoperating expenses in the Condensed Consolidated Statement of Operations on the line item "Non-service related pension and postretirement benefit costs."

20. Commitments and Contingencies

The Company accrues for costs related to contingencies when a loss is probable and the amount is reasonably determinable. Disclosure of contingencies is included in the financial statements when it is at least reasonably possible that a material loss or an additional material loss in excess of amounts already accrued may be incurred.

In addition, the Company is a party to numerous other claims and lawsuits with respect to various matters. The ultimate resolution of any such legal matter could result in outcomes that may be materially different from amounts the Company has accrued for such matters. The Company believes it has recorded adequate reserves for these matters.

21. Segment Information

The Company's reportable business segments are based on two distinct lines of business, metallurgical and thermal, and may include a number of mine complexes. The Company manages its coal sales by market, not by individual mining complex. Geology, coal transportation routes to customers, and regulatory environments also have a significant impact on the Company's marketing and operations management. Mining operations are evaluated based on Adjusted EBITDA, per-ton cash operating costs (defined as including all mining costs except depreciation, depletion, amortization, accretion on asset retirement obligations, and pass-through transportation expenses), and on other non-financial measures, such as safety and environmental performance. Adjusted EBITDA is not a measure of financial performance in accordance with generally accepted accounting principles, and items excluded from Adjusted EBITDA are significant in understanding and assessing the Company's financial condition. Therefore, Adjusted EBITDA should not be considered in isolation, nor as an alternative to net income (loss), income (loss) from operations, cash flows from operations or as a measure of our profitability, liquidity or performance under generally accepted accounting principles. The Company uses Adjusted EBITDA to measure the operating performance of its segments and allocate resources to the segments. Furthermore, analogous measures are used by industry analysts and investors to evaluate the Company's operating performance. Investors should be aware that the Company's presentation of Adjusted EBITDA may not be comparable to similarly titled measures used by other companies. The Company reports its results of operations primarily through the following reportable segments: Powder River Basin (PRB) segment containing the Company's primary thermal operations in Wyoming; the Metallurgical (MET) segment, containing the Company's metallurgical operations in West Virginia, and the Other Thermal segment containing the Company's supplementary thermal operations in Colorado and Illinois.

On December 13, 2019, the Company closed on its definitive agreement to sell Coal-Mac LLC, an operating mine complex within the Company's Other Thermal coal segment. Coal-Mac is included in the Other Thermal segment results below up to the date of the divestiture.

Operating segment results for the three and nine months ended September 30, 2020 and 2019, are presented below. The Corporate, Other and Eliminations grouping includes these charges: idle operations; change in fair value of coal derivatives and coal trading activities, net; corporate overhead; land management activities; other support functions; and the elimination of intercompany transactions.

(In thousands)	PRB	MET	Other Thermal	Corporate, Other and Eliminations	Consolidated
Three Months Ended September 30, 2020					
Revenues	$ 180,850	$ 168,054	$ 32,449	$ 908	$ 382,261
Adjusted EBITDA	34,486	12,407	(2,870)	(26,597)	17,426
Depreciation, depletion and amortization	5,847	24,221	2,303	259	32,630
Accretion on asset retirement obligation	3,495	486	347	619	4,947
Total assets	189,942	759,202	26,766	677,427	1,653,337
Capital expenditures	26	57,424	542	(892)	57,100
Three Months Ended September 30, 2019					
Revenues	$ 269,968	$ 254,493	$ 94,052	$ 954	$ 619,467
Adjusted EBITDA	50,153	70,814	16,659	(31,005)	106,621
Depreciation, depletion and amortization	5,956	19,962	3,852	479	30,249
Accretion on asset retirement obligation	3,135	531	603	868	5,137
Total assets	236,656	609,378	148,994	939,572	1,934,600
Capital expenditures	5,402	36,475	6,837	738	49,452
Nine Months Ended September 30, 2020					
Revenues	$ 492,406	$ 489,660	$ 105,481	$ 19,467	$ 1,107,014
Adjusted EBITDA	28,542	76,037	(8,942)	(76,028)	19,609
Depreciation, depletion and amortization	16,337	69,028	6,973	1,767	94,105
Accretion on asset retirement obligation	10,484	1,458	1,042	1,955	14,939
Total assets	189,942	759,202	26,766	677,427	1,653,337
Capital expenditures	4,268	193,586	5,113	2,694	205,661
Nine Months Ended September 30, 2019					
Revenues	$ 692,845	$ 769,000	$ 278,235	$ 4,792	$ 1,744,872
Adjusted EBITDA	85,433	264,284	33,699	(63,977)	319,439
Depreciation, depletion and amortization	15,702	53,687	10,976	1,757	82,122
Accretion on asset retirement obligation	9,406	1,592	1,810	2,603	15,411
Total assets	236,656	609,378	148,994	939,572	1,934,600
Capital expenditures	19,026	98,849	16,299	3,222	137,396

A reconciliation of net income (loss) to adjusted EBITDA follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
(In thousands)	**2020**	**2019**	**2020**	**2019**
Net income (loss)	$ (191,467)	$ 106,769	$ (266,090)	$ 242,350
Provision for (benefit from) income taxes	379	347	(206)	508
Interest expense, net	2,530	340	6,389	4,916
Depreciation, depletion and amortization	32,630	30,249	94,105	82,122
Accretion on asset retirement obligations	4,947	5,137	14,939	15,411
Costs related to proposed joint venture with Peabody Energy	4,423	3,754	15,938	6,772
Asset impairment	163,088	—	163,088	—
Severance costs related to voluntary separation plan	18	—	13,283	—
Gain on property insurance recovery related to Mountain Laurel longwall	—	—	(23,518)	—
(Gain) loss on divestitures	—	—	(1,369)	4,304
Preference Rights Lease Application settlement income	—	(39,000)	—	(39,000)
Non-service related pension and postretirement benefit costs	878	(975)	3,076	2,127
Reorganization items, net	—	—	(26)	(71)
Adjusted EBITDA	$ 17,426	$ 106,621	$ 19,609	$ 319,439

22. Revenue Recognition

ASC 606-10-50-5 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 606-10-55-89 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.

In general, the Company's business segmentation is aligned according to the nature and economic characteristics of its coal and customer relationships and provides meaningful disaggregation of each segment's results. The Company has further disaggregated revenue between North America and Seaborne revenues which depicts the pricing and contract differences between the two. North America revenue is characterized by contracts that typically have a term of one year or longer and typically the pricing is fixed; whereas Seaborne revenue generally is derived by spot or short term contracts with pricing determined at the time of shipment or based on a market index.

	PRB	MET	Other Thermal	Corporate, Other and Eliminations	Consolidated
			(in thousands)		
Three Months Ended September 30, 2020					
North America revenues	$ 180,097	$ 47,197	$ 28,176	$ 908	$ 256,378
Seaborne revenues	753	120,857	4,273	—	125,883
Total revenues	$ 180,850	$ 168,054	$ 32,449	$ 908	$ 382,261
Three Months Ended September 30, 2019					
North America revenues	$ 269,968	$ 63,755	$ 47,571	$ 954	$ 382,248
Seaborne revenues	—	190,738	46,481	—	237,219
Total revenues	$ 269,968	$ 254,493	$ 94,052	$ 954	$ 619,467
Nine Months Ended September 30, 2020					
North America revenues	$ 491,471	$ 117,058	$ 87,909	$ 19,467	$ 715,905
Seaborne revenues	935	372,602	17,572	—	391,109
Total revenues	$ 492,406	$ 489,660	$ 105,481	$ 19,467	$ 1,107,014
Nine Months Ended September 30, 2019					
North America revenues	$ 692,845	$ 163,317	$ 141,985	$ 4,792	$ 1,002,939
Seaborne revenues	—	605,683	136,250	—	741,933
Total revenues	$ 692,845	$ 769,000	$ 278,235	$ 4,792	$ 1,744,872

As of September 30, 2020, the Company has outstanding performance obligations for the remainder of 2020 of 16.5 million tons of fixed price contracts and 1.0 million tons of variable price contracts. Additionally, the Company has outstanding performance obligations beyond 2020 of approximately 83.6 million tons of fixed price contracts and 5.0 million tons of variable price contracts.

23. Leases

The Company has operating and financing leases for mining equipment, office equipment, office space and transloading terminals with remaining lease terms ranging from less than one year to approximately seven years. 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. As most of the leases do not provide an implicit rate, the Company calculated the ROU assets and lease liabilities using its secured incremental borrowing rate at the lease commencement date.

Information related to leases was as follows:

	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Operating lease information:	(In thousands)	
Operating lease cost	$ 846	$ 1,071
Operating cash flows from operating leases	860	1,078
Weighted average remaining lease term in years	6.20	6.19
Weighted average discount rate	5.5 %	5.5 %
Financing lease information:		
Financing lease cost	$ 393	$ —
Operating cash flows from financing leases	303	—
Weighted average remaining lease term in years	4.50	—
Weighted average discount rate	6.4 %	— %

Future minimum lease payments under non-cancellable leases as of September 30, 2020 were as follows:

Year	Operating Leases	Finance Leases
	(In thousands)	
2020	$ 823	$ 303
2021	3,367	1,210
2022	3,317	1,210
2023	3,285	1,210
2024	3,200	1,210
Thereafter	7,798	2,111
Total minimum lease payments	$ 21,790	$ 7,254
Less imputed interest	(3,485)	(1,173)
Total lease liabilities	$ 18,305	$ 6,081
As reflected on balance sheet:		
Accrued expenses and other current liabilities	$ 2,427	$ 847
Other noncurrent liabilities	15,878	5,234
Total lease liability	$ 18,305	$ 6,081

At September 30, 2020, the Company had an $17.6 million ROU operating lease asset and a $5.9 million finance lease asset recorded within “Other noncurrent assets” on the Condensed Consolidated Balance Sheet.

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

Cautionary Notice Regarding Forward-Looking Statements

This report contains "forward-looking statements" - that is, statements related to future, not past, events. In this context, forward-looking statements often address our expected future business and financial performance, and often contain words such as "should," "appears," "expects," "anticipates," "intends," "plans," "believes," "seeks," or "will." Forward-looking statements by their nature address matters that are, to different degrees, uncertain. For us, particular uncertainties arise from the COVID-19 pandemic, including its adverse effects on businesses, economies, and financial markets worldwide; from changes in the demand for our coal by the domestic electric generation and steel industries; from our ability to access the capital markets on acceptable terms and conditions; from legislation and regulations relating to the Clean Air Act and other environmental initiatives; from competition within our industry and with producers of competing energy sources; from our ability to successfully acquire or develop coal reserves; from operational, geological, permit, labor and weather-related factors; from the Tax Cuts and Jobs Act and other tax reforms; from the effects of foreign and domestic trade policies, actions or disputes; from fluctuations in the amount of cash we generate from operations, which could impact, among other things, our ability to pay dividends or repurchase shares in accordance with our announced capital allocation plan; from our ability to successfully integrate the operations that we acquire; from the impacts related to the termination of the proposed joint venture transaction with Peabody Energy Corporation; from our ability to generate significant revenue to make payments required by, and to comply with restrictions related to, our tax-exempt bonds; and from numerous other matters of national, regional and global scale, including those of a political, economic, business, competitive or regulatory nature. These uncertainties may cause our actual future results to be materially different than those expressed in our forward-looking statements. We do not undertake to update our forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by law. For a description of some of the risks and uncertainties that may affect our future results, you should see the "Risk Factors" in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2019 and subsequent Form 10-Q filings.

COVID-19

In the first quarter of 2020, COVID-19 emerged as a global level pandemic. The continuing responses to the COVID-19 outbreak include actions that have a significant impact on domestic and global economies, including travel restrictions, gathering bans, stay at home orders, and many other restrictive measures. All of our operations have been classified as essential in the states in which we operate. We have instituted many policies and procedures, in alignment with CDC guidelines and local mandates, to protect our employees during the COVID-19 outbreak. These policies and procedures include, but are not limited to, staggering shift times to limit the number of people in common areas at one time, limiting meetings and meeting sizes, continual cleaning and disinfecting of high touch and high traffic areas, including door handles, bath rooms, bath houses, access elevators, mining equipment, and other areas, limiting contractor access to our properties, limiting business travel, and instituting work from home for administrative employees. We plan to keep these policies and procedures in place and continually evaluate further enhancements for as long as necessary. We recognize that the COVID-19 outbreak and responses thereto will also impact both our customers and suppliers. To date, we have not had any significant issues with critical suppliers, and we continue to communicate with them and closely monitor their developments to ensure we have access to the goods and services required to maintain our operations and continue our Leer South development. Our customers have reacted, and continue to react, in various ways and to varying degrees to declining demand for their products. We have received force majeure letters from certain of our customers, primarily related to our thermal segments. During the current quarter, we concluded commercial negotiations with certain customers deferring over three million tons of Powder River Basin contractual obligations from 2020 to future periods in exchange for over eight million tons of additional commitments in future periods. Less than 0.2 million tons of domestic coking coal contracted for 2020 have been deferred to 2021. Our current view of our customer demand situation is discussed in greater detail in the "Overview" section below.

Overview

Our results for the third quarter of 2020 were impacted by continued weakness in metallurgical and thermal coal markets. Initial responses to the COVID-19 outbreak precipitated demand destruction that further weakened already depressed thermal and metallurgical coal markets. During the current quarter many of the initial responses to the COVID-19 outbreak were mitigated in certain areas of the national and global economy, stemming further decline in demand by the middle of the quarter.

The industrial shutdowns, particularly in the automotive sector, that drove significant reductions in steel demand and the idling of multiple blast furnaces globally, began to reverse in the third quarter, leading to increasing steel demand and the restarting of many idled blast furnaces. In particular, domestic auto production returned to pre-shutdown levels in July. The return of industrial production to pre-pandemic levels has been, and will continue to be uneven; for example, oil and gas drilling activity remains significantly depressed. The return of industrial production to pre-COVID-19 levels is also likely to be lengthy and subject to possible setbacks should COVID-19 become resurgent. Demand for steel making raw materials, like coking coal, are at the end of the supply chain and saw a lag in improved demand from the ramp up of industrial production. By the end of the quarter, international prompt and forward coking coal pricing had improved from lows experienced in the current quarter. On the supply side, further high cost coking coal mine idlings were announced in North America and the overall production volume removed from the market this year is significant. We believe that the cash cost of a significant portion of global seaborne coking coal production, including much of North American coking coal production, exceeds current prompt pricing. To date, due to our low cost structure, we have avoided idling any of our coking coal operations. Longer term, we believe continued limited global capital investment in new coking coal production capacity, economic pressure on higher cost production sources, and production responses to the virus outbreak will provide support to coking coal markets as demand continues to return to the steel production supply chain.

Demand for domestic thermal coal improved in the current quarter from lows in the first half of the year due to the anticipated summer cooling season demand, favorable weather during this cooling season, and increased natural gas prices. However, demand levels remain significantly below those in the prior year due to COVID-19 related commercial and industrial demand declines and the continued increase in renewable generation sources, particularly wind. Natural gas pricing recovered from historically low levels during the current quarter, and coal fired generation, particularly Powder River Basin fired generation, was competitive in many regions of the country during the peak cooling season. Production levels of natural gas were below the prior year's levels, but storage levels remain significantly above this time last year. Additionally, generator coal stockpiles declined during the current quarter, but remain significantly above historical averages based on days of burn. International thermal coal market pricing remained at levels that are uneconomic for all of our thermal operations. Similar to metallurgical markets discussed above, actions taken to combat the spread of COVID-19 across many regions of the national and global economy continue to negatively impact thermal coal demand and supply. As a result, we expect domestic and global thermal markets to remain challenged.

On September 29, 2020 the U.S. District Court ruled against our proposal with Peabody to form a joint venture that would have combined our Powder River Basin and Colorado mining operations with Peabody's. Following the ruling, we announced the termination of our joint venture efforts due to the significant investment of time, resources and funds that would be required to conduct an appeal. In light of the unfavorable ruling and decision to terminate efforts on the joint venture, we will pursue other strategic alternatives for our thermal assets. These alternatives include, among other things, potential divestiture. We will concurrently evaluate opportunities to shrink our operational footprint at those mines, reduce their asset retirement obligations, and establish self-funding mechanisms to address those long-term liabilities. Operationally we will maintain our focus on aligning our thermal production rates with declining domestic thermal coal demand, adjusting our thermal operating plans in order to minimize future cash requirements, and streamlining our entire organizational structure to reflect our long-term strategic direction as a leading producer of metallurgical products for the steelmaking industry.

Results of Operations

Three Months Ended September 30, 2020 and 2019

Revenues. Our revenues include sales to customers of coal produced at our operations and coal purchased from third parties. Transportation costs are included in cost of coal sales and amounts billed by us to our customers for transportation are included in revenues.

Coal Sales. The following table summarizes information about our coal sales during the three months ended September 30, 2020 and 2019:

	Three Months Ended September 30,		
	2020	2019	(Decrease) / Increase
		(In thousands)	
Coal sales	$ 382,261	$ 619,467	$ (237,206)
Tons sold	17,128	26,257	(9,129)

On a consolidated basis, coal sales in the third quarter of 2020 were approximately $237.2 million or 38.3% less than in the third quarter of 2019, while tons sold decreased approximately 9.1 million tons or 34.8%. Coal sales from Metallurgical operations decreased approximately $86.4 million due to decreased pricing and volume. Powder River Basin coal sales decreased approximately $89.1 million due to decreased volume, and Other Thermal coal sales decreased approximately $61.6 million due to decreased volume and pricing. In the prior year quarter, our Coal-Mac operation in our Other Thermal Segment, which was sold in December 2019, provided approximately $30.8 million in coal sales and 0.6 million tons sold. See discussion in "Operational Performance" for further information about segment results.

Costs, expenses and other. The following table summarizes costs, expenses and other components of operating income during the three months ended September 30, 2020 and 2019:

	Three Months Ended September 30,		
	2020	2019	Increase (Decrease) in Net Income
		(In thousands)	
Cost of sales (exclusive of items shown separately below)	$ 345,539	$ 491,004	$ 145,465
Depreciation, depletion and amortization	32,630	30,249	(2,381)
Accretion on asset retirement obligations	4,947	5,137	190
Change in fair value of coal derivatives and coal trading activities, net	2,649	1,530	(1,119)
Selling, general and administrative expenses	21,541	24,566	3,025
Costs related to proposed joint venture with Peabody Energy	4,423	3,754	(669)
Asset impairment	163,088	—	(163,088)
Severance costs related to voluntary separation plan	18	—	(18)
Preference Rights Lease Application settlement income	—	(39,000)	(39,000)
Other operating income, net	(4,894)	(4,254)	640
Total costs, expenses and other	$ 569,941	$ 512,986	$ (56,955)

Cost of sales. Our cost of sales for the third quarter of 2020 decreased approximately $145.5 million or 29.6% versus the third quarter of 2019. In the prior year quarter, our Coal-Mac operation, which was sold in December 2019, accounted for approximately $30.8 million in cost of sales. The decline in cost of sales at ongoing operations consists primarily of reduced repairs and supplies costs of approximately $59.5 million, including approximately $12.8 million in reduced diesel fuel costs, reduced transportation costs of approximately $25.0 million, reduced operating taxes and royalties of approximately $27.0 million, and reduced compensation costs of approximately $6.9 million. These cost decreases were partially offset by a larger decrease in coal inventory value versus the prior year quarter of approximately $3.7 million. See discussion in "Operational Performance" for further information about segment results.

Depreciation, depletion, and amortization. The increase in depreciation, depletion, and amortization in the third quarter of 2020 versus the third quarter of 2019 is primarily due to increased depreciation of plant and equipment and amortization of development in our Metallurgical segment.

Change in fair value of coal derivatives and coal trading activities, net. The cost in both the third quarter of 2020 and 2019 is primarily related to mark-to-market losses on coal derivatives that we had entered into to hedge our price risk for anticipated international thermal coal shipments.

Selling, general and administrative expenses. Selling, general and administrative expenses in the third quarter of 2020 decreased versus the third quarter of 2019 due primarily to decreased compensation costs of approximately $3.7 million, which includes the impact of reduced headcount from our voluntary separation program recognized in the first quarter of 2020, partially offset by increased contractor services of approximately $0.9 million.

Costs related to proposed joint venture with Peabody Energy. On June 18, 2019, we entered into a definitive implementation agreement (the “Implementation Agreement”) with Peabody, to establish a joint venture that would have combined the companies’ Powder River Basin and Colorado mining operations. All costs associated with execution of the Implementation Agreement are reflected herein. On September 29, 2020 the U.S. District Court for the Eastern District of Missouri ruled against the proposed joint venture, and we announced the termination of our joint venture efforts due to the significant investment of time, resources and investment that would be required to conduct an appeal. For further information on our proposed joint venture with Peabody Energy, see Note 3, “Joint Venture with Peabody Energy” to the Condensed Consolidated Financial Statements.

Asset Impairment. In the third quarter of 2020 we determined that we had indicators of impairment related to three of our thermal operations, Coal Creek, West Elk, and Viper. Additionally, we determined that we had indicators of impairment related to our equity investment in Knight Hawk Holdings LLC. Our analyses of future expected cash flows from these assets indicated full impairment of our listed thermal operations and partial impairment of our equity investment in Knight Hawk Holdings LLC. For further information on our Asset Impairment costs, see Note 8, “Asset Impairment” to the Condensed Consolidated Financial Statements.

Preference Rights Lease Application (PRLA) settlement income. Our PRLA settlement income in the third quarter of 2019 relates to a settlement with the United States Department of Interior over a long-standing dispute on the valuation and disposition of PRLAs that we controlled in northwestern New Mexico. For further information on our PRLA settlement income see Note 7, “Preference Rights Lease Application Settlement Income” to the Condensed Consolidated Financial Statements.

Other operating income, net. The increase in other operating income, net in the third quarter of 2020 versus the third quarter of 2019 consists primarily of the favorable impact of mark-to-market movement on heating oil derivatives of approximately $1.5 million and increased income from equity investments of approximately $0.9 million, partially offset by the unfavorable impact of certain coal derivative settlements of approximately $0.6 million and reduced transloading income of approximately $1.0 million.

Nonoperating (expenses) income. The following table summarizes our nonoperating (expenses) income during the three months ended September 30, 2020 and 2019:

	Three Months Ended September 30,		
	2020	2019	Increase (Decrease) in Net Income
		(In thousands)	
Non-service related pension and postretirement benefit (costs) credits	$ (878)	$ 975	$ (1,853)

Non-service related pension and postretirement benefit costs. The cost in non-service related pension and postretirement benefit costs in the third quarter of 2020 versus the benefit in the third quarter of 2019 is primarily due to increased postretirement benefit gain amortization in the third quarter of 2019.

Provision for income taxes. The following table summarizes our provision for income taxes during the three months ended September 30, 2020 and 2019:

	Three Months Ended September 30,		
	2020	2019	Increase (Decrease) in Net Income
	(In thousands)		
Provision for income taxes	$ 379	$ 347	$ (32)

See Note 15, "Income Taxes," to the Condensed Consolidated Financial Statements for a reconciliation of the federal income tax provision at the statutory rate to the actual provision for income taxes.

Nine Months Ended September 30, 2020 and 2019

Revenues. Our revenues include sales to customers of coal produced at our operations and coal purchased from third parties. Transportation costs are included in cost of coal sales and amounts billed by us to our customers for transportation are included in revenues.

Coal Sales. The following table summarizes information about our coal sales during the nine months ended September 30, 2020 and 2019:

	Nine Months Ended September 30,		
	2020	2019	(Decrease) / Increase
		(In thousands)	
Coal sales	$ 1,107,014	$ 1,744,872	$ (637,858)
Tons sold	47,367	67,958	(20,591)

On a consolidated basis, coal sales in the first nine months of 2020 were approximately $637.9 million or 36.6% less than in the first nine months of 2019, while tons sold decreased approximately 20.6 million tons or 30.3%. Coal sales from Metallurgical operations decreased approximately $279.3 million due to decreased volume and pricing. Powder River Basin coal sales decreased approximately $200.4 million due to decreased volume, and Other Thermal coal sales decreased approximately $172.8 million due to decreased volume and pricing. In the prior year period, our Coal-Mac operation in our Other Thermal Segment, which was sold in December 2019, provided approximately $85.8 million in coal sales and 1.6 million tons sold. See discussion in “Operational Performance” for further information about segment results.

Costs, expenses and other. The following table summarizes costs, expenses and other components of operating income during the nine months ended September 30, 2020 and 2019:

	Nine Months Ended September 30,		
	2020	2019	Increase (Decrease) in Net Income
		(In thousands)	
Cost of sales (exclusive of items shown separately below)	$ 1,036,886	$ 1,380,563	$ 343,677
Depreciation, depletion and amortization	94,105	82,122	(11,983)
Accretion on asset retirement obligations	14,939	15,411	472
Change in fair value of coal derivatives and coal trading activities, net	3,263	(19,851)	(23,114)
Selling, general and administrative expenses	64,024	73,864	9,840
Costs related to proposed joint venture with Peabody Energy	15,938	6,772	(9,166)
Asset impairment	163,088	—	(163,088)
Severance costs related to voluntary separation plan	13,283	—	(13,283)
Gain on property insurance recovery related to Mountain Laurel longwall	(23,518)	—	23,518
(Gain) loss on divestitures	(1,369)	4,304	5,673
Preference Rights Lease Application settlement income	—	(39,000)	(39,000)
Other operating income, net	(16,768)	(9,143)	7,625
Total costs, expenses and other	$ 1,363,871	$ 1,495,042	$ 131,171

Cost of sales. Our cost of sales for the first nine months of 2020 decreased approximately $343.7 million or 24.9% versus the first nine months of 2019. In the prior year period, our Coal-Mac operation, which was sold in December 2019, accounted for approximately $85.3 million in cost of sales. The decline in cost of sales at ongoing operations consists primarily of reduced repairs and supplies costs of approximately $139.3 million, including approximately $28.0 million in reduced diesel fuel costs, reduced transportation costs of approximately $67.9 million, reduced operating taxes and royalties of approximately $62.1 million, and reduced compensation costs of approximately $15.0 million. These cost decreases were partially offset by a smaller increase in coal inventory value versus the prior year period of approximately $16.8 million, and increased purchased coal cost of approximately $14.5 million. See discussion in “Operational Performance” for further information about segment results.

Depreciation, depletion, and amortization. The increase in depreciation, depletion, and amortization in the first nine months of 2020 versus the first nine months of 2019 is primarily due to increased depreciation of plant and equipment, amortization of development, and depletion in our Metallurgical segment.

Change in fair value of coal derivatives and coal trading activities, net. The significant benefit in the first nine months of 2019 is primarily related to mark-to-market gains on coal derivatives that we had entered to hedge our price risk for anticipated international thermal coal shipments.

Selling, general and administrative expenses. Selling, general and administrative expenses in the first nine months of 2020 decreased versus the first nine months of 2019 due primarily to decreased compensation costs of approximately $10.2 million, which includes the impact of reduced headcount from our voluntary separation program recognized in the first quarter of 2020.

Costs related to proposed joint venture with Peabody Energy. On June 18, 2019, we entered into a definitive implementation agreement (the “Implementation Agreement”) with Peabody, to establish a joint venture that would have combined the companies’ Powder River Basin and Colorado mining operations. All costs associated with execution of the Implementation Agreement are reflected herein. On September 29, 2020 the U.S. District Court for the Eastern District of Missouri ruled against the proposed joint venture, and we announced the termination of our joint venture efforts due to the significant investment of time, resources and investment that would be required to conduct an appeal. For further information on our proposed joint venture with Peabody Energy, see Note 3, “Joint Venture with Peabody Energy” to the Condensed Consolidated Financial Statements.

Asset Impairment. In the third quarter of 2020 we determined that we had indicators of impairment related to three of our thermal operations, Coal Creek, West Elk, and Viper. Additionally, we determined we had indicators of impairment related to our equity investment in Knight Hawk Holdings LLC. Our analyses of future expected cash flows from these assets indicted full impairment of our listed thermal operations and partial impairment of our equity investment in Knight Hawk Holdings LLC. For further information on our Asset Impairment costs, see Note 8, “Asset Impairment” to the Condensed Consolidated Financial Statements.

Severance costs related to voluntary separation plan (VSP). In the current year period we recorded approximately $13.3 million of employee severance expense related to voluntary separation plans that were accepted by 53 employees of the corporate staff and 201 employees of our thermal operations. For further information on our VSP costs see Note 5, “Severance Costs Related to Voluntary Separation Plan” to the Condensed Consolidated Financial Statements.

Gain on property insurance recovery related to Mountain Laurel longwall. In the current year period we recorded a $23.5 million benefit from insurance proceeds related to the loss of certain longwall shields at our Mountain Laurel operation in November of 2019. For further information on our gain on property insurance recovery related to Mountain Laurel longwall, see Note 4, “Gain on Property Insurance Recovery Related to Mountain Laurel Longwall” to the Condensed Consolidated Financial Statements.

(Gain) loss on divestitures. In the current year period we recorded a $1.4 million gain on the sale of our idle Dal-Tex and Briar Branch properties. In the prior year period we recorded a loss on our sale of Lone Mountain Processing, LLC related to certain workers’ compensation liabilities that may accrue to us as a result of the bankruptcy filing of Revelation Energy LLC. For further information on this gain and loss, see Note 6, “Divestitures” to the Condensed Consolidated Financial Statements.

Other operating income, net. The increase in other operating income, net in the first nine months of 2020 versus the first nine months of 2019 consists primarily of the favorable impact of certain coal derivative settlements of approximately $9.0 million, increased outlease royalty income of 1.6 million, and increased income from equity investments of approximately $1.7 million, partially offset by reduced transloading income of approximately $2.5 million and a gain on sale of certain right of way rights in the prior year period of approximately $2.3 million.

Nonoperating (expenses) income. The following table summarizes our nonoperating (expense) income during the nine months ended September 30, 2020 and 2019:

	Nine Months Ended September 30,		
	2020	2019	Increase (Decrease) in Net Income
		(In thousands)	
Non-service related pension and postretirement benefit (costs) credits	$ (3,076)	$ (2,127)	$ (949)
Reorganization items, net	26	71	(45)
Total nonoperating (expenses) income	$ (3,050)	$ (2,056)	$ (994)

Non-service related pension and postretirement benefit costs. The increase in non-service related pension and postretirement benefit costs in the first nine months of 2020 versus the first nine months of 2019 is primarily due to increased postretirement benefit gain amortization in the first nine months of 2019.

Provision for (benefit from) income taxes. The following table summarizes our provision for (benefit from) income taxes during the nine months ended September 30, 2020 and 2019:

	Nine Months Ended September 30,		
	2020	2019	Increase (Decrease) in Net Income
		(In thousands)	
Provision for (benefit from) income taxes	$ (206)	$ 508	$ 714

See Note 15, “Income Taxes,” to the Condensed Consolidated Financial Statements for a reconciliation of the federal income tax provision (benefit) at the statutory rate to the actual provision for (benefit from) income taxes.

Operational Performance

Three and Nine Months Ended September 30, 2020 and 2019

Our mining operations are evaluated based on Adjusted EBITDA, per-ton cash operating costs (defined as including all mining costs except depreciation, depletion, amortization, accretion on asset retirements obligations, and pass-through transportation expenses), and on other non-financial measures, such as safety and environmental performance. Adjusted EBITDA is defined as net income (loss) attributable to the Company before the effect of net interest expense, income taxes, depreciation, depletion and amortization, the accretion on asset retirement obligations and nonoperating expenses. Adjusted EBITDA may also be adjusted for items that may not reflect the trend of future results by excluding transactions that are not indicative of our core operating performance. Adjusted EBITDA is not a measure of financial performance in accordance with generally accepted accounting principles, and items excluded from Adjusted EBITDA are significant in understanding and assessing our financial condition. Therefore, Adjusted EBITDA should not be considered in isolation, nor as an alternative to net income (loss), income (loss) from operations, cash flows from operations or as a measure of our profitability, liquidity or performance under generally accepted accounting principles. Furthermore, analogous measures are used by industry analysts and investors to evaluate the Company's operating performance. Investors should be aware that our presentation of Adjusted EBITDA may not be comparable to similarly titled measures used by other companies.

The following table shows results by operating segment for the three and nine months ended September 30, 2020 and September 30, 2019.

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2020	2019	Variance	2020	2019	Variance
Powder River Basin						
Tons sold (in thousands)	14,309	22,156	(7,847)	39,078	56,445	(17,367)
Coal sales per ton sold	$ 12.41	$ 12.02	$ 0.39	$ 12.36	$ 12.09	$ 0.27
Cash cost per ton sold	$ 10.03	$ 9.77	$ (0.26)	$ 11.69	$ 10.60	$ (1.09)
Cash margin per ton sold	$ 2.38	$ 2.25	$ 0.13	$ 0.67	$ 1.49	$ (0.82)
Adjusted EBITDA (in thousands)	$ 34,486	$ 50,153	$ (15,667)	$ 28,542	$ 85,433	$ (56,891)
Metallurgical						
Tons sold (in thousands)	1,971	2,084	(113)	5,225	5,769	(544)
Coal sales per ton sold	$ 67.04	$ 98.89	$ (31.85)	$ 74.83	$ 110.47	$ (35.64)
Cash cost per ton sold	$ 60.78	$ 64.89	$ 4.11	$ 60.31	$ 64.70	$ 4.39
Cash margin per ton sold	$ 6.26	$ 34.00	$ (27.74)	$ 14.52	$ 45.77	$ (31.25)
Adjusted EBITDA (in thousands)	$ 12,407	$ 70,814	$ (58,407)	$ 76,037	$ 264,284	$ (188,247)
Other Thermal						
Tons sold (in thousands)	822	1,986	(1,164)	2,571	5,589	(3,018)
Coal sales per ton sold	$ 32.06	$ 39.52	$ (7.46)	$ 31.83	$ 39.09	$ (7.26)
Cash cost per ton sold	$ 35.02	$ 31.16	$ (3.86)	$ 35.61	$ 33.24	$ (2.37)
Cash margin per ton sold	$ (2.96)	$ 8.36	$ (11.32)	$ (3.78)	$ 5.85	$ (9.63)
Adjusted EBITDA (in thousands)	$ (2,870)	$ 16,659	$ (19,529)	$ (8,942)	$ 33,699	$ (42,641)

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

Powder River Basin — Adjusted EBITDA for the three and nine months ended September 30, 2020 decreased versus the three and nine months ended September 30, 2019, due to decreased volume versus the prior year periods. Pricing increased, and cash cost per ton sold increased, particularly in the nine month period, driven by the decrease in volume and the reimposition of a higher Federal Black Lung Excise Tax rate. Pricing in the current periods benefitted from our ability to recoup the reimposition of the higher Federal Black Lung Excise Tax rate under certain of our term supply contracts. The volume decline was primarily due to competitive natural gas pricing, and the continued growth of renewable generation sources, particularly wind. Natural gas pricing reached historical lows during the current year periods, but pricing of the competing fuel was volatile in the current year three month period even exceeding prior year prices at times. Natural gas production levels fell below prior year levels, but natural gas storage levels remained above prior year levels and these opposing market forces led to pricing volatility. The continued buildout of subsidized renewable generation sources, particularly wind, significantly increased the market share of renewable generation in the current year periods. During the current year periods, we also experienced reduced electric generation related to demand destruction due to restrictive responses taken to combat the spread of COVID-19. During the current year three month period, generator stockpiles of thermal coal declined from historical highs seen earlier in the current year, but remain above historical averages in terms of days of burn. Our Powder River Basin shipment volumes will continue to be pressured as natural gas prices remain competitive, subsidized renewable generation continues to grow, and thermal coal stockpiles remain elevated. Additionally, we are at risk of further demand destruction should a resurgence of COVID-19 lead to the imposition of economically damaging responses to control the spread of the virus.

In 2019 the Federal Black Lung Excise Tax rate reverted to the pre-1986 rates. For 2020, Congress reimposed the higher 1986 to 2018 rates of $0.55 per ton sold or 4.4% of gross selling price on all domestic sales. For 2019, the Federal Black Lung Excise Tax rate for surface mines was $0.25 per ton or 2% of gross selling price on all domestic sales.

Metallurgical — Adjusted EBITDA for the three and nine months ended September 30, 2020 decreased from the three and nine months ended September 30, 2019 due to the decline in coking coal pricing and shipment volume discussed in the "Overview" section above, partially offset by decreased cash cost per ton sold. The cost decrease was driven by an increase in the percentage of segment tons sold from our low cost Leer mine in the current year periods. Additionally, operating tax and royalty costs declined in the current year periods due to lower pricing and a severance tax credit. Actions taken to combat the spread of COVID-19 continued to significantly impact our metallurgical segment in the third quarter of 2020. In particular, the initial industrial shutdowns and subsequent uneven recovery discussed in the "Overview" section above continued to have a negative impact on the entire steel making supply chain. These impacts include a significant decline in coking coal pricing and deferral of some shipments out of the current year.

Our Metallurgical segment sold 1.7 million tons of coking coal and 0.3 million tons of associated thermal coal in the three months ended September 30, 2020, compared to 1.9 million tons of coking coal and 0.2 million tons of associated thermal coal in the three months ended September 30, 2019. For the nine months ended September 30, 2020, our Metallurgical segment sold 4.5 million tons of coking coal and 0.7 million tons of associated thermal coal compared to 5.0 million tons of coking coal and 0.8 million tons of associated thermal coal in the nine months ended September 30, 2019. Longwall operations accounted for approximately 60% of our shipment volume in both the three and nine months ended September 30, 2020, respectively, compared to approximately 78% and 72% of our shipment volume in the three and nine months ended September 30, 2019, respectively.

Other Thermal — Adjusted EBITDA for the three and nine months ended September 30, 2020 decreased versus the three and nine months ended September 30, 2019 due to reduced sales volume, decreased pricing, and increased cash cost per ton sold. All of these metrics are impacted by the inclusion of our former Coal-Mac operation, which was sold in December 2019. Coal-Mac provided approximately 0.6 and 1.6 million tons sold in the three and nine months ended September 30, 2019, respectively. Tons sold from ongoing operations declined approximately 0.6 million tons in the three months ended September 30, 2020 and 1.4 million tons in the nine months ended September 30, 2020 as competitive natural gas pricing, increased renewable generation, and uneconomic international pricing impacted volume. In addition, in late March of the current year we temporarily idled our Viper mine due to nonperformance of the mine's primary customer. The customer restarted deliveries in early May, and we reopened the mine at approximately the same time. We are at risk of further demand destruction should a resurgence of COVID-19 lead to the imposition of economically damaging responses to control the spread of the virus.

Reconciliation of Non-GAAP measures

Segment coal sales per ton sold

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

Three Months Ended September 30, 2020 (In thousands)	**Powder River Basin**	**Metallurgical**	**Other Thermal**	**Idle and Other**	**Consolidated**
GAAP Revenues in the Condensed Consolidated Statements of Operations	$ 180,850	$ 168,054	$ 32,449	$ 908	$ 382,261
Less: Adjustments to reconcile to Non-GAAP Segment coal sales revenue					
Coal risk management derivative settlements classified in "other income"	—	(29)	(2,552)	—	(2,581)
Coal sales revenues from idled or otherwise disposed operations not included in segments	—	—	—	903	903
Transportation costs	3,341	35,951	8,655	5	47,952
Non-GAAP Segment coal sales revenues	$ 177,509	$ 132,132	$ 26,346	$ —	$ 335,987
Tons sold	14,309	1,971	822		
Coal sales per ton sold	$ 12.41	$ 67.04	$ 32.06		

Three Months Ended September 30, 2019 (In thousands)	**Powder River Basin**	**Metallurgical**	**Other Thermal**	**Idle and Other**	**Consolidated**
GAAP Revenues in the Condensed Consolidated Statements of Operations	$ 269,968	$ 254,493	$ 94,052	$ 954	$ 619,467
Less: Adjustments to reconcile to Non-GAAP Segment coal sales revenue					
Coal risk management derivative settlements classified in "other income"	—	(506)	(4,533)	—	(5,039)
Coal sales revenues from idled or otherwise disposed operations not included in segments	—	—	—	954	954
Transportation costs	3,581	48,925	20,080	—	72,586
Non-GAAP Segment coal sales revenues	$ 266,387	$ 206,074	$ 78,505	—	$ 550,966
Tons sold	22,156	2,084	1,986		
Coal sales per ton sold	$ 12.02	$ 98.89	$ 39.52		

Nine Months Ended September 30, 2020 (In thousands)	Powder River Basin	Metallurgical	Other Thermal	Idle and Other	Consolidated
GAAP Revenues in the Condensed Consolidated Statements of Operations	$ 492,406	$ 489,660	$ 105,481	$ 19,467	$ 1,107,014
Less: Adjustments to reconcile to Non-GAAP Segment coal sales revenue					
Coal risk management derivative settlements classified in "other income"	—	(548)	(6,366)	—	(6,914)
Coal sales revenues from idled or otherwise disposed operations not included in segments	—	—	—	19,395	19,395
Transportation costs	9,402	99,188	30,016	72	138,678
Non-GAAP Segment coal sales revenues	$ 483,004	$ 391,020	$ 81,831	$ —	$ 955,855
Tons sold	39,078	5,225	2,571		
Coal sales per ton sold	$ 12.36	$ 74.83	$ 31.83		

Nine Months Ended September 30, 2019 (In thousands)	Powder River Basin	Metallurgical	Other Thermal	Idle and Other	Consolidated
GAAP Revenues in the Condensed Consolidated Statements of Operations	$ 692,845	$ 769,000	$ 278,235	$ 4,792	$ 1,744,872
Less: Adjustments to reconcile to Non-GAAP Segment coal sales revenue					
Coal risk management derivative settlements classified in "other income"	—	(506)	(3,524)	—	(4,030)
Coal sales revenues from idled or otherwise disposed operations not included in segments	—	—	—	4,792	4,792
Transportation costs	10,511	132,187	63,302	—	206,000
Non-GAAP Segment coal sales revenues	$ 682,334	$ 637,319	$ 218,457	—	$ 1,538,110
Tons sold	56,445	5,769	5,589		
Coal sales per ton sold	$ 12.09	$ 110.47	$ 39.09		

Segment cash cost per ton sold

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

Three Months Ended September 30, 2020 **(In thousands)**	**Powder River Basin**	**Metallurgical**	**Other Thermal**	**Idle and Other**	**Consolidated**
GAAP Cost of sales in the Condensed Consolidated Statements of Operations	$ 146,610	$ 155,729	$ 37,435	$ 5,765	$ 345,539
Less: Adjustments to reconcile to Non-GAAP Segment cash cost of coal sales					
Diesel fuel risk management derivative settlements classified in "other income"	(278)	—	—	—	(278)
Transportation costs	3,341	35,951	8,655	5	47,952
Cost of coal sales from idled or otherwise disposed operations not included in segments	—	—	—	4,007	4,007
Other (operating overhead, certain actuarial, etc.)	—	—	—	1,753	1,753
Non-GAAP Segment cash cost of coal sales	143,547	119,778	28,780	—	292,105
Tons sold	14,309	1,971	822		
Cash Cost Per Ton Sold	$ 10.03	$ 60.78	$ 35.02		

Three Months Ended September 30, 2019 **(In thousands)**	**Powder River Basin**	**Metallurgical**	**Other Thermal**	**Idle and Other**	**Consolidated**
GAAP Cost of sales in the Condensed Consolidated Statements of Operations	$ 218,966	$ 184,149	$ 81,976	$ 5,913	$ 491,004
Less: Adjustments to reconcile to Non-GAAP Segment cash cost of coal sales					
Diesel fuel risk management derivative settlements classified in "other income"	(1,057)	—	—	—	(1,057)
Transportation costs	3,581	48,925	20,080	—	72,586
Cost of coal sales from idled or otherwise disposed operations not included in segments	—	—	—	3,871	3,871
Other (operating overhead, certain actuarial, etc.)	—	—	—	2,042	2,042
Non-GAAP Segment cash cost of coal sales	$ 216,442	$ 135,224	$ 61,896	$ —	$ 413,562
Tons sold	22,156	2,084	1,986		
Cash Cost Per Ton Sold	$ 9.77	$ 64.89	$ 31.16		

Nine Months Ended September 30, 2020 (In thousands)	Powder River Basin	Metallurgical	Other Thermal	Idle and Other	Consolidated
GAAP Cost of sales in the Condensed Consolidated Statements of Operations	$ 464,252	$ 414,301	$ 121,585	$ 36,748	$ 1,036,886
Less: Adjustments to reconcile to Non-GAAP Segment cash cost of coal sales	—				
Diesel fuel risk management derivative settlements classified in "other income"	(1,976)	—	—	—	(1,976)
Transportation costs	9,402	99,188	30,016	72	138,678
Cost of coal sales from idled or otherwise disposed operations not included in segments	—	—	—	30,960	30,960
Other (operating overhead, certain actuarial, etc.)	—	—	—	5,716	5,716
Non-GAAP Segment cash cost of coal sales	456,826	315,113	91,569	—	863,508
Tons sold	39,078	5,225	2,571		
Cash Cost Per Ton Sold	$ 11.69	$ 60.31	$ 35.61		

Nine Months Ended September 30, 2019 (In thousands)	Powder River Basin	Metallurgical	Other Thermal	Idle and Other	Consolidated
GAAP Cost of sales in the Condensed Consolidated Statements of Operations	$ 606,561	$ 505,479	$ 249,091	$ 19,432	$ 1,380,563
Less: Adjustments to reconcile to Non-GAAP Segment cash cost of coal sales					
Diesel fuel risk management derivative settlements classified in "other income"	(2,307)	—	—	—	(2,307)
Transportation costs	10,511	132,187	63,302	—	206,000
Cost of coal sales from idled or otherwise disposed operations not included in segments	—	—	—	12,690	12,690
Other (operating overhead, certain actuarial, etc.)	—	—	—	6,742	6,742
Non-GAAP Segment cash cost of coal sales	$ 598,357	$ 373,292	$ 185,789	$ —	$ 1,157,438
Tons sold	56,445	5,769	5,589		
Cash Cost Per Ton Sold	$ 10.60	$ 64.70	$ 33.24		

Reconciliation of Segment Adjusted EBITDA to Net Income (Loss)

The discussion in “Results of Operations” above includes references to our Adjusted EBITDA for each of our reportable segments. Adjusted EBITDA is defined as net income attributable to the Company before the effect of net interest expense, income taxes, depreciation, depletion and amortization, the accretion on asset retirement obligations and nonoperating expenses. Adjusted EBITDA may also be adjusted for items that may not reflect the trend of future results by excluding transactions that are not indicative of our core operating performance. We use Adjusted EBITDA to measure the operating performance of our segments and allocate resources to our segments. Adjusted EBITDA is not a measure of financial performance in accordance with generally accepted accounting principles, and items excluded from Adjusted EBITDA are significant in understanding and assessing our financial condition. Therefore, Adjusted EBITDA should not be considered in isolation, nor as an alternative to net income (loss), income (loss) from operations, cash flows from operations or as a measure of our profitability, liquidity or performance under generally accepted accounting principles. Investors should be aware that our presentation of Adjusted EBITDA may not be comparable to similarly titled measures used by other companies. The table below shows how we calculate Adjusted EBITDA.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
	(In thousands)			
Net income (loss)	$ (191,467)	$ 106,769	$ (266,090)	$ 242,350
Provision for (benefit from) income taxes	379	347	(206)	508
Interest expense, net	2,530	340	6,389	4,916
Depreciation, depletion and amortization	32,630	30,249	94,105	82,122
Accretion on asset retirement obligations	4,947	5,137	14,939	15,411
Costs related to proposed joint venture with Peabody Energy	4,423	3,754	15,938	6,772
Asset impairment	163,088	—	163,088	—
Severance costs related to voluntary separation plan	18	—	13,283	—
Gain on property insurance recovery related to Mountain Laurel longwall	—	—	(23,518)	—
(Gain) loss on divestitures	—	—	(1,369)	4,304
Preference Rights Lease Application settlement income	—	(39,000)	—	(39,000)
Non-service related pension and postretirement benefit costs	878	(975)	3,076	2,127
Reorganization items, net	—	—	(26)	(71)
Adjusted EBITDA	17,426	106,621	19,609	319,439
EBITDA from idled or otherwise disposed operations	2,896	2,584	10,691	3,151
Selling, general and administrative expenses	21,541	24,566	64,024	73,864
Other	2,160	3,855	1,313	(13,038)
Segment Adjusted EBITDA from coal operations	$ 44,023	$ 137,626	$ 95,637	$ 383,416

Other includes income from our equity investments, certain changes in fair value of heating oil and diesel fuel derivatives we use to manage our exposure to diesel fuel pricing, certain changes in the fair value of coal derivatives and coal trading activities, EBITDA provided by our land company, and certain miscellaneous revenue.

Liquidity and Capital Resources

Our primary sources of liquidity are proceeds from coal sales to customers and certain financing arrangements. Excluding significant investing activity, we intend to satisfy our working capital requirements and fund capital expenditures and debt-service obligations with cash generated from operations and cash on hand. As we continue to evaluate the impacts of COVID-19 and the responses thereto on our business, we remain focused on prudently managing costs, including capital expenditures, maintaining a strong balance sheet, and ensuring adequate liquidity.

Given the volatile nature of coal markets, and the significant challenges and uncertainty surrounding the COVID-19 outbreak, we believe it is increasingly important to take a prudent approach to managing our balance sheet and liquidity, as demonstrated by the suspension of our dividend and share repurchases. While we continue to prefer targeted liquidity levels of at least $400 million, with a significant portion of that being cash, it is likely that our liquidity will remain below our preferred levels while the COVID-19 outbreak and the responses thereto continue. Due to the current economic uncertainties related to COVID-19 and the related disruption in the financial markets, we may be limited in accessing capital markets or obtaining additional bank financing or the cost of accessing this financing could become more expensive. We believe our current liquidity level is sufficient to fund our business; however, given the uncertainty in the global economy and our primary markets, we believe it is prudent to explore opportunities to secure additional capital to further enhance our liquidity position as we drive forward with our Leer South development. In the future, we will continue to evaluate our capital allocation initiatives in light of the current state of, and our outlook, for coal markets; the amount of our planned production that has been committed and priced; the capital needs of the business; other strategic opportunities; and developments in the COVID-19 outbreak and the responses thereto.

On March 7, 2017, we entered into a senior secured term loan credit agreement in an aggregate principal amount of $300 million (the “Term Loan Debt Facility”) with Credit Suisse AG, Cayman Islands Branch, as administrative agent and collateral agent and the other financial institutions from time to time party thereto. The Term Loan Debt Facility was issued at 99.50% of the face amount and will mature on March 7, 2024. The term loans provided under the Term Loan Debt Facility (the “Term Loans”) are subject to quarterly principal amortization payments in an amount equal to $750,000. Proceeds from the Term Loan Debt Facility were used to repay all outstanding obligations under our previously existing term loan credit agreement, dated as of October 5, 2016.

On April 3, 2018, we entered into the Second Amendment (the “Second Amendment”) to the Term Loan Debt Facility. The Second Amendment reduced the interest rate on the Term Loan to, at our option, either (i) the London interbank offered rate (“LIBOR”) plus an applicable margin of 2.75%, subject to a 1.00% LIBOR floor, or (ii) a base rate plus an applicable margin of 1.75%. For further information regarding the Term Loan Debt Facility, see Note 14, “Debt and Financing Arrangements” to the Condensed Consolidated Financial Statements.

We have entered into a series of interest rate swaps to fix a portion of the LIBOR interest payments due under the term loan. As interest payments are made on the term loan, amounts in accumulated other comprehensive income will be reclassified into earnings through interest expense to reflect a net interest on the term loan equal to the effective yield of the fixed rate of the swap plus 2.75%, which is the spread on the LIBOR term loan as amended. For further information regarding the interest rate swaps, see Note 14, “Debt and Financing Arrangements” to the Condensed Consolidated Financial Statements.

On September 30, 2020, we extended and amended our existing trade accounts receivable securitization facility provided to Arch Receivable Company, LLC, a special-purpose entity that is a wholly owned subsidiary of Arch Resources (“Arch Receivable”) (the “Extended Securitization Facility”), which supports the issuance of letters of credit and requests for cash advances. The amendment to the Extended Securitization Facility changed the facility size from $160 million to $110 million and extended the maturity date to September 29, 2023. Additionally, the amendment eliminated the provision that accelerated maturity of the facility upon falling below a specified level of liquidity and modified the pricing for the Extended Securitization Facility. Pursuant to the Extended Securitization Facility, we also agreed to a revised schedule of fees payable to the administrator and the providers of the Extended Securitization Facility. For further information regarding the Extended Securitization Facility see Note 14, “Debt and Financing Arrangements” to the Condensed Consolidated Financial Statements.

On September 30, 2020, we amended the senior secured inventory-based revolving credit facility in an aggregate principal amount of $50 million (the “Inventory Facility”) with Regions Bank (“Regions”) as administrative agent and collateral agent, as lender and swingline lender (in such capacities, the “Lender”) and as letter of credit issuer. Availability under the Inventory Facility is subject to a borrowing base consisting of (i) 85% of the net orderly liquidation value of eligible coal inventory, (ii) the lesser of (x) 85% of the net orderly liquidation value of eligible parts and supplies inventory and (y) 35% of the amount determined pursuant to clause (i), and (iii) 100% of Arch Resources’s Eligible Cash (defined in the Inventory Facility), subject to reduction for reserves imposed by Regions. The amendment of the Inventory Facility extended the maturity date to September 29, 2023, eliminated the provision that accelerated maturity of the facility upon falling below a specified level of liquidity, and reduced the minimum liquidity requirement from $175 million to $100 million. Additionally, the amendment includes provisions that reduce the advance rates for coal inventory and parts and supplies, depending on Liquidity. For further information regarding the Inventory Facility, see Note 14, “Debt and Financing Arrangements” to the Condensed Consolidated Financial Statements.

On March 4, 2020, we entered into an equipment financing arrangement accounted for as debt. We received $53.6 million in exchange for conveying an interest in certain equipment in operation at our Leer Mine and entered into a 48 month master lease arrangement for use of that equipment. Upon maturity, all interests in the equipment will revert back to us. For further information regarding this equipment financing arrangement, see Note 14, “Debt and Financing Arrangements” to the Condensed Consolidated Financial Statements.

On July 2, 2020, the West Virginia Economic Development Authority (the “Issuer”) issued $53.1 million aggregate principal amount of Solid Waste Disposal Facility Revenue Bonds (Arch Resources Project), Series 2020 (the “Bonds”) pursuant to an Indenture of Trust dated as of June 1, 2020 (the “Indenture”) between the Issuer and Citibank, N.A., as trustee (the “Trustee”). The proceeds of the Bonds are loaned to us as we make qualifying expenditures pursuant to a Loan Agreement dated as of June 1, 2020 between the Issuer and us. The Bonds are payable solely from payments to be made by us under the Loan Agreement as evidenced by a Note from us to the Trustee. The proceeds of the Bonds were used to finance certain costs of the acquisition, construction, reconstruction, and equipping of solid waste disposal facilities at our Leer South development, and for capitalized interest and certain costs related to issuance of the Bonds. As of September 30, 2020, we have received $38.1 million of the total bonds issues. The remaining $13.9 is held in trust and is recorded on our balance sheet as restricted cash. The remainder of the funds will be released as qualified expenditures are made over the next several quarters. For further information regarding these bonds, see Note 14, “Debt and Financing Arrangements” to the Condensed Consolidated Financial Statements.

On April 27, 2017, our Board of Directors authorized a capital return program consisting of a share repurchase program and a quarterly cash dividend. The share repurchase plan has a total authorization of $1.05 billion of which we have used $827.4 million. During the quarter ended September 30, 2020, we did not repurchase any shares of our stock. On April 23, 2020 we announced the suspension of our quarterly dividend due to the significant economic uncertainty surrounding the COVID-19 virus and the steps being taken to control the virus. During the quarter ended September 30, 2020, we did not pay any dividends on shares of our stock. The timing and amount of any future dividends or of any future share purchases and the ultimate number of shares to be purchased will depend on a number of factors, including business and market conditions, our future financial performance, and other capital priorities. Any shares acquired would be in the open market or through private transactions in accordance with Securities and Exchange Commission requirements.

On September 30, 2020 we had total liquidity of approximately $265 million including $220 million in unrestricted cash and equivalents, and short term investments in debt securities, with the remainder provided by availability under our credit facilities, and funds withdrawable from brokerage accounts. The table below summarizes our availability under our credit facilities as of September 30, 2020:

	Face Amount	Borrowing Base	Letters of Credit Outstanding	Availability	Contractual Expiration
	(Dollars in thousands)				
Securitization Facility	$ 110,000	$ 84,500	$ 49,990	$ 34,510	September 29, 2023
Inventory Facility	50,000	39,306	29,195	10,111	September 29, 2023
Total	$ 160,000	$ 123,806	$ 79,185	$ 44,621	

The above standby letters of credit outstanding have primarily been issued to satisfy certain insurance-related collateral requirements. The amount of collateral required by counterparties is based on their assessment of our ability to satisfy our obligations and may change at the time of policy renewal or based on a change in their assessment. Future increases in the amount of collateral required by counterparties would reduce our available liquidity.

The following is a summary of cash provided by or used in each of the indicated types of activities during the nine months ended September 30, 2020 and 2019:

	Nine Months Ended September 30,	
(In thousands)	2020	2019
Cash provided by (used in):		
Operating activities	$ 55,914	$ 334,053
Investing activities	(111,945)	(154,002)
Financing activities	73,585	(269,560)

Cash Flow

Cash provided by operating activities decreased in the nine months ended September 30, 2020 versus the nine months ended September 30, 2019 mainly due to the deterioration of results from operations discussed in the “Overview” and “Operational Performance” sections above.

Cash used in investing activities decreased in the nine months ended September 30, 2020 versus the nine months ended September 30, 2019 primarily due to an approximately $84 million increase in net proceeds from short term investments, and approximately $24 million in property insurance proceeds on our Mountain Laurel longwall claim, partially offset by increased capital expenditures of approximately $68 million. Capital spending in the first nine months of 2020 includes approximately $154 million related to our Leer South mine development.

Cash was provided by financing activities in the nine months ended September 30, 2020 compared to cash used in financing activities in the nine months ended September 30, 2019 primarily due to suspension of treasury stock purchases and dividend payments, and proceeds from the new $54 million equipment financing arrangement, and proceeds of approximately $53 million from the new tax exempt bond issuance. For further information regarding the equipment financing arrangement and tax free bonds, see Note 14, “Debt and Financing Arrangements” to the Condensed Consolidated Financial Statements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

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

Our sales commitments for 2020 and 2021 were as follows as of October 22, 2020:

	2020		2021	
	Tons	$ per ton	Tons	$per ton
Metallurgical	(in millions)		(in millions)	
Committed, North America Priced Coking	1.6	$ 106.80	1.7	$ 90.07
Committed, North America Unpriced Coking	—		—	
Committed, Seaborne Priced Coking	3.6	76.53	0.2	80.83
Committed, Seaborne Unpriced Coking	0.8		1.8	
Committed, Priced Thermal	0.9	18.46	0.1	19.58
Committed, Unpriced Thermal	0.1		—	
Powder River Basin				
Committed, Priced	53.6	$ 12.35	42.8	$ 12.56
Committed, Unpriced	0.4		3.0	
Other Thermal				
Committed, Priced	3.2	$ 30.12	1.7	$ 34.28
Committed, Unpriced	0.1		—	

We are also exposed to commodity price risk in our coal trading activities, which represents the potential future loss that could be caused by an adverse change in the market value of coal. Our coal trading portfolio included swap and put and call option contracts at September 30, 2020. The estimated future realization of the value of the trading portfolio is $0.2 million of losses during the remainder of 2020 and $0.3 million of gains during 2021.

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

VaR is a statistical one-tail confidence interval and down side risk estimate that relies on recent history to estimate how the value of the portfolio of positions will change if markets behave in the same way as they have in the recent past. The level of confidence is 95%. The time across which these possible value changes are being estimated is through the end of the next business day. A closed-form delta-neutral method used throughout the finance and energy sectors is employed to calculate this VaR. VaR is back tested to verify its usefulness. As of September 30, 2020, VaR was immaterial to the financial statements.

We are exposed to price risk with respect to diesel fuel purchased for use in our operations. We anticipate purchasing approximately 30 to 35 million gallons of diesel fuel for use in our operations annually. To protect our cash flows from increases in the price of diesel fuel for our operations, we use forward physical diesel purchase contracts, purchased heating oil call options and New York Mercantile Exchange ("NYMEX") gulf coast diesel swaps and options. At September 30, 2020, we had protected the price on the majority of our expected diesel fuel purchases for the remainder of 2020 with approximately 2 million gallons of heating oil call options with an average strike price of $1.76 per gallon and 2 million gallons of NYMEX gulf coast diesel swaps at an average price of approximately $1.05 per gallon. These positions are not designated as hedges for accounting purposes, and therefore, changes in the fair value are recorded immediately to earnings.

Item 4. Controls and Procedures.

We performed an evaluation under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of September 30, 2020. Based on that evaluation, our management, including our chief executive officer and chief financial officer, concluded that the disclosure controls and procedures were effective as of such date. There were no changes in our internal control over financial reporting during the fiscal quarter to which this report relates that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II

OTHER INFORMATION

Item 1. Legal Proceedings

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

FTC Temporary Restraining Order and Preliminary Injunction Blocking Joint Venture with Peabody

On June 18, 2019, Arch Resources entered into the Implementation Agreement with Peabody to establish a joint venture that would have combined the companies' respective Powder River Basin and Colorado mining operations.

Formation of the joint venture was subject to customary closing conditions, including the termination or expiration of the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, the receipt of certain other required regulatory approvals and the absence of injunctions or other legal restraints preventing the formation of the joint venture. Formation of the joint venture did not require approval of our stockholders or Peabody's stockholders.

On February 26, 2020, the Federal Trade Commission ("FTC") filed an administrative complaint challenging the proposed joint venture alleging that the transaction would have eliminated competition between us and Peabody, the two major competitors in the market for thermal coal in the Southern Powder River Basin and the two largest coal-mining companies in the United States. On February 26, 2020, the FTC filed for a temporary restraining order and preliminary injunction in the U.S. District Court for the Eastern District of Missouri, to maintain the status quo pending an administrative trial on the merits.

Between July 14 and July 23, 2020, the U.S. District Court conducted an evidentiary hearing, during which both sides further presented their evidence and arguments. On September 29, 2020, the U.S. District Court upheld the FTC's decision to block the joint venture. Subsequently, the Company and Peabody jointly terminated the joint venture.

Item 1A. Risk Factors

The COVID-19 pandemic has adversely affected, and will continue to adversely affect, our business, financial condition, liquidity and results of operations.

The coronavirus disease 2019 (“COVID-19”) pandemic has resulted in a widespread health crisis that has adversely affected businesses, economies and financial markets worldwide. The full impact of COVID-19 is unknown and rapidly evolving. Our business, financial condition, liquidity and results of operations have been, and will continue to be, adversely affected by the COVID-19 pandemic. Our profitability and the value of our coal reserves depend upon the prices we receive for our coal, which are largely dependent on prevailing market prices. Measures taken to address and limit the spread of the disease—such as stay-at-home orders, social distancing guidelines, and travel restrictions—have adversely affected the economies and financial markets of many countries, resulting in an economic downturn that has in turn negatively impacted, and may continue to negatively impact, global demand and prices for coal, as well as a widespread increase in unemployment that is expected to further reduce demand and prices for coal. These conditions may lead to extreme volatility of coal prices, severely limited liquidity and credit availability and declining valuations of assets, which may adversely affect our business, financial condition, liquidity and results of operations.

In addition, the COVID-19 pandemic, and measures taken by governments, organizations, the Company and its customers to reduce its effects could potentially impact the Company’s employees, customers and suppliers. Such disruptions may continue or increase in the future, and could adversely affect, our business, financial condition, liquidity and results of operations.

The COVID-19 pandemic may also have the effect of heightening many of the other risks described in Item 1A, “Risk Factors” of our annual report on Form 10-K for the year ended December 31, 2019, including, but not limited to, those relating to: coal prices; economic and market conditions; decreases in coal consumption; our ability to fund necessary capital expenditures; disruptions in the availability of mining and other industrial supplies; changes in purchasing patterns of our customers and their effects on our coal supply agreements; our reliance on key managers and employees; and our ability to access the capital markets and obtain financing and insurance upon favorable terms; among others.

The full extent to which the COVID-19 pandemic will impact our results is unknown and evolving, and will depend on future developments, which are highly uncertain and cannot be predicted. These include the severity, duration and spread of COVID-19, the success of actions taken by governments and health organizations to combat the disease and treat its effects, including additional remedial legislation, and the extent to which, and when, general economic and operating conditions recover. Accordingly, any resulting financial impact cannot be reasonably estimated at this time but such amounts may be material.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

On April 17, 2019, the Board of Directors authorized an additional $300 million to the share repurchase program, bringing the total authorization since the program’s launch to $1.05 billion. The timing of any future share purchases, and the ultimate number of shares to be purchased, will depend on a number of factors, including business and market conditions, our future financial performance, and other capital priorities. The shares will be acquired in the open market or through private transactions in accordance with Securities and Exchange Commission requirements. The share repurchase program has no termination date, but may be amended, suspended or discontinued at any time and does not commit us to repurchase shares of our common stock. The actual number and value of the shares to be purchased will depend on the performance of our stock price and other market conditions. We did not purchase any shares of our common stock under this program for the quarter ended September 30, 2020.

As of September 30, 2020, we had approximately $223 million remaining authorized for stock repurchases under this program.

Item 4. Mine Safety Disclosures.

The statement concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K is included in Exhibit 95 to this Quarterly Report on Form 10-Q for the period ended September 30, 2020.

Item 6. Exhibits.

2.1	Debtors' Fourth Amended Joint Plan of Reorganization Under Chapter 11 of the Bankruptcy Code (incorporated by reference to Exhibit 2.1 of Arch Resources's Current Report on Form 8-K filed on September 15, 2016).
2.2	Order Confirming Debtors' Fourth Amended Joint Plan of Reorganization Under Chapter 11 of the Bankruptcy Code on September 13, 2016 (incorporated by reference to Exhibit 2.2 of Arch Resources's Current Report on Form 8-K filed on September 15, 2016).
3.1	Amended and Restated Certificate of Incorporation of Arch Resources, Inc. (incorporated by reference to Exhibit 3.1 of Arch Resources's registration statement on Form 8-A filed on October 4, 2016).
3.2	Bylaws of Arch Resources, Inc. (incorporated by reference to Exhibit 3.2 of Arch Resources's registration on Form 8-A filed on October 4, 2016).
4.1	Form of specimen Class A Common Stock certificate (incorporated by reference to Exhibit 4.1 of Arch Resources's Current Report on Form 8-K filed on October 11, 2016).
4.2	Form of specimen Class B Common Stock certificate (incorporated by reference to Exhibit 4.2 of Arch Resources's Current Report on Form 8-K filed on October 11, 2016).
4.3	Form of specimen Series A Warrant certificate (incorporated by reference to Exhibit A of Exhibit 10.5 of Arch Resources's Current Report on Form 8-K filed on October 11, 2016).
4.4	Description of Registrant's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934, as amended (incorporated by reference to Exhibit 4.4 of Arch Resources's Current Report on Form 10-K filed on February 11, 2020).
10.1	Credit Agreement, dated as of March 7, 2017, among Arch Resources, Inc. as borrower, the lenders from time to time party thereto and Credit Suisse AG, Cayman Islands Branch, in its capacities as administrative agent and as collateral agent (incorporated by reference to Exhibit 10.1 of Arch Resources's Current Report on Form 8-K filed on March 8, 2017).
10.2	First Amendment to Credit Agreement, dated as of September 25, 2017, among Arch Resources, Inc. as borrower, the lenders from time to time party thereto and Credit Suisse AG, Cayman Islands Branch, in its capacities as administrative agent and as collateral agent (incorporated by reference to Exhibit 10.1 of Arch Resources's Current Report on Form 8-K filed on September 25, 2017).
10.3	Second Amendment to Credit Agreement, dated as of April 3, 2018, among Arch Resources, Inc. as borrower, the lenders from time to time party thereto and Credit Suisse AG, Cayman Islands Branch, in its capacities as administrative agent and as collateral agent (incorporated by reference to Exhibit 10.1 of Arch Resources's Current Report on Form 8-K filed on April 3, 2018).
10.4	Credit Agreement, dated as of April 27, 2017, among Arch Resources, Inc. and certain of its subsidiaries, as borrowers, the lenders from time to time party thereto and Regions Bank, in its capacities as administrative agent and as collateral agent (incorporated by reference to Exhibit 10.1 of Arch Resources's Current Report on Form 8-K filed on May 2, 2017).
10.5	First Amendment to Credit Agreement dated November 19, 2018 by and among Arch Resources, Inc. and certain of its subsidiaries, as borrowers, the lenders from time to time party thereto and Regions Bank, in its capacities as administrative agent and as collateral agent (incorporated by reference to Exhibit 10.5 to Arch Resources's Annual Report on Form 10-K for the year ended 2018).

10.6	Waiver Letter Agreement and Second Amendment to Credit Agreement dated June 17, 2020 by and among Arch Resources, Inc. and certain of its subsidiaries, as borrowers, the lenders from time to time party thereto Regions Bank, in its capacities as administrative agent and as collateral agent.
10.7	Third Amendment to Credit Agreement dated September 30, 2020, by and among Arch Resources, Inc. and certain of its subsidiaries, as borrowers, the lenders from time to time party thereto Regions Bank, in its capacities as administrative agent and as collateral agent.
10.8	Third Amended and Restated Receivables Purchase Agreement among Arch Receivable Company, LLC, as seller, Arch Coal Sales Company, Inc., as initial servicer, PNC Bank, National Association as administrator and issuer of letters of credit thereunder and the other parties party thereto, as securitization purchasers (incorporated by reference to Exhibit 10.2 of Arch Resources's Current Report on Form 8-K filed on October 11, 2016).
10.9	First Amendment to Third Amended and Restated Receivables Purchase Agreement, dated as of April 27, 2017, among Arch Receivable Company, LLC, as seller, Arch Coal Sales Company, Inc., as servicer, PNC Bank, National Association as administrator and issuer of letters of credit thereunder and the other parties party thereto, as securitization purchasers (incorporated by reference to Exhibit 10.2 of Arch Coal's Current Report on Form 8-K filed on May 2, 2017).
10.10	Second Amendment to Third Amended and Restated Receivables Purchase Agreement, dated as of August 27, 2018, among Arch Receivable Company, LLC, as seller, Arch Coal Sales Company, Inc., as servicer, PNC Bank, National Association as administrator and issuer of letters of credit thereunder and the other parties party thereto, as securitization purchasers (incorporated by reference to Exhibit 10.7 of Arch Resources's Quarterly Report on Form 10-Q for the period ended September 30, 2018).
10.11	Third Amendment to Third Amended and Restated Receivables Purchase Agreement, dated as of May 1, 2019, among Arch Receivable Company, LLC, as seller, Arch Coal Sales Company, Inc., as servicer, PNC Bank, National Association as administrator and issuer of letters of credit thereunder and the other parties party thereto, as securitization purchasers (incorporated by reference to Exhibit 10.9 of Arch Resources's Quarterly Report on Form 10-Q for the period ended September 30, 2019).
10.12	Fourth Amendment to Third Amended and Restated Receivables Purchase Agreement, dated September 30, 2020, among Arch Receivable Company, LLC, as seller, Arch Coal Sales Company, Inc., as servicer, PNC Bank, National Association as administrator and issuer of letters of credit thereunder and the other parties party thereto, as securitization purchasers.
10.13	Second Amended and Restated Purchase and Sale Agreement among Arch Resources, Inc. and certain subsidiaries of Arch Resources, Inc., as originators (incorporated by reference to Exhibit 10.3 of Arch Resources's Current Report on Form 8-K filed on October 11, 2016).
10.14	First Amendment to the Second Amended and Restated Purchase and Sale Agreement, dated as of December 21, 2016, among Arch Resources, Inc. and certain subsidiaries of Arch Resources, Inc., as originators (incorporated by reference to Exhibit 10.7 of Arch Resources's Current Report on Form 8-K filed on October 31, 2017).
10.15	Second Amendment to the Second Amended and Restated Purchase and Sale Agreement, dated as of April 27, 2017, among the Arch Resources, Inc. and certain subsidiaries of the Arch Resources, Inc., as originators (incorporated by reference to Exhibit 10.3 of Arch Resources's Current Report on Form 8-K filed on May 2, 2017).
10.16	Second Amended and Restated Sale and Contribution Agreement between Arch Resources, Inc., as the transferor, and Arch Receivable Company, LLC (incorporated by reference to Exhibit 10.4 of Arch Resources's Current Report on Form 8-K filed on October 11, 2016).

10.17	First Amendment to the Second Amended and Restated Sale and Contribution Agreement, dated as of April 27, 2017, between Arch Resources, Inc., as the transferor, and Arch Receivable Company, LLC (incorporated by reference to Exhibit 10.4 of Arch Resources's Current Report on Form 8-K filed on May 2, 2017).
10.18	Warrant Agreement, dated as of October 5, 2016, between Arch Resources, Inc. and American Stock Transfer & Trust Company, LLC, as Warrant Agent (incorporated by reference to Exhibit 10.5 of Arch Resources's Current Report on Form 8-K filed on October 11, 2016).
10.19	Indemnification Agreement between Arch Resources and the directors and officers of Arch Resources and its subsidiaries (form) (incorporated by reference to Exhibit 10.6 of Arch Resources's Current Report on Form 8-K filed on October 11, 2016).
10.20	Registration Rights Agreement between Arch Resources and Monarch Alternative Capital LP and certain other affiliated funds (incorporated by reference to Exhibit 10.1 of Arch Resources's Current Report on Form 8-K filed on November 21, 2016)
10.21	Coal Lease Agreement dated as of March 31, 1992, among Allegheny Land Company, as lessee, and UAC and Phoenix Coal Corporation, as lessors, and related guarantee (incorporated herein by reference to the Current Report on Form 8-K filed by Ashland Coal, Inc. on April 6, 1992).
10.22	Federal Coal Lease dated as of January 24, 1996 between the U.S. Department of the Interior and the Thunder Basin Coal Company (incorporated herein by reference to Exhibit 10.20 to Arch Resources's Annual Report on Form 10-K for the year ended December 31, 1998).
10.23	Federal Coal Lease Readjustment dated as of November 1, 1967 between the U.S. Department of the Interior and the Thunder Basin Coal Company (incorporated herein by reference to Exhibit 10.21 to Arch Resources's Annual Report on Form 10-K for the year ended December 31, 1998).
10.24	Federal Coal Lease effective as of May 1, 1995 between the U.S. Department of the Interior and Mountain Coal Company (incorporated herein by reference to Exhibit 10.22 to Arch Resources's Annual Report on Form 10-K for the year ended December 31, 1998).
10.25	Federal Coal Lease dated as of January 1, 1999 between the Department of the Interior and Ark Land Company (incorporated herein by reference to Exhibit 10.23 to Arch Resources's Annual Report on Form 10-K for the year ended December 31, 1998).
10.26	Federal Coal Lease effective as of March 1, 2005 by and between the United States of America and Ark Land LT, Inc. covering the tract of land known as "Little Thunder" in Campbell County, Wyoming (incorporated by reference to Exhibit 99.1 to the Current Report on Form 8-K filed by Arch Resources on February 10, 2005).
10.27	Modified Coal Lease (WYW71692) executed January 1, 2003 by and between the United States of America, through the Bureau of Land Management, as lessor, and Triton Coal Company, LLC, as lessee, covering a tract of land known as "North Rochelle" in Campbell County, Wyoming (incorporated by reference to Exhibit 10.24 to Arch Resources's Annual Report on Form 10-K for the year ended December 31, 2004).
10.28	Coal Lease (WYW127221) executed January 1, 1998 by and between the United States of America, through the Bureau of Land Management, as lessor, and Triton Coal Company, LLC, as lessee, covering a tract of land known as "North Roundup" in Campbell County, Wyoming (incorporated by reference to Exhibit 10.24 to Arch Resources's Annual Report on Form 10-K for the year ended December 31, 2004).
10.29*	Form of Employment Agreement for Executive Officers of Arch Resources, Inc. (incorporated herein by reference to Exhibit 10.4 to Arch Resources's Annual Report on Form 10-K for the year ended December 31, 2011).

10.30*	Arch Resources, Inc. Deferred Compensation Plan (incorporated herein by reference to Exhibit 10.26 to Arch Resources's Annual Report on Form 10-K for the year ended December 31, 2014).
10.31	Arch Resources, Inc. Outside Directors' Deferred Compensation Plan (incorporated herein by reference to Exhibit 10.4 of Arch Resources's Current Report on Form 8-K filed on December 11, 2008).
10.32*	Arch Resources, Inc. Supplemental Retirement Plan (as amended on December 5, 2008) (incorporated herein by reference to Exhibit 10.2 to Arch Resources's Current Report on Form 8-K filed on December 11, 2008).
10.33*	Arch Resources, Inc. 2016 Omnibus Incentive Plan (incorporated herein by reference to Exhibit 99.1 to Arch Resources's Registration Statement on Form S-8 filed on November 1, 2016).
10.34*	Form of Restricted Stock Unit Contract (Time-Based Vesting) (incorporated herein by reference to Exhibit 10.1 to Arch Resources's Current Report on Form 8-K filed on November 30, 2016).
10.35*	Form of Restricted Stock Unit Contract (Performance-Based Vesting) (incorporated herein by reference to Exhibit 10.2 to Arch Resources's Current Report on Form 8-k filed on November 30, 2016).
10.36	Stock Repurchase Agreement dated September 13, 2017, among Arch Resources, Inc. and Monarch Alternative Solutions Master Fund Ltd, Monarch Capital Master Partners III LP, MCP Holdings Master LP, Monarch Debt Recovery Master Fund Ltd and P Monarch Recovery Ltd. (incorporated by reference to Exhibit 10.1 of Arch Resources's Current Report on Form 8-K filed on September 19, 2017).
10.37	Stock Repurchase Agreement dated December 8, 2017, among Arch Resources, Inc. and Monarch Alternative Solutions Master Fund Ltd, Monarch Capital Master Partners III LP, MCP Holdings Master LP, and Monarch Debt Recovery Master Fund Ltd (incorporated by reference to Exhibit 10.1 of Arch Resources's Current Report on Form 8-K filed on December 11, 2017).
10.38*	Form of Cash Retention Award Agreement for the Chief Executive Officer, Chief Operating Officer and Chief Financial Officer of the Company (incorporated by reference to Exhibit 10.37 to Arch Resources's Annual Report on Form 10-K for the year ended 2018).
10.39	Implementation Agreement, dated as of June 18, 2019, by and between Arch Resources, Inc. and Peabody Energy Corporation (incorporated by reference to Exhibit 2.1 of Arch Resources's Current Report on Form 8-K/A filed on June 19, 2019).
31.1	Rule 13a-14(a)/15d-14(a) Certification of Paul A. Lang.
31.2	Rule 13a-14(a)/15d-14(a) Certification of Matthew C. Giljum.
32.1	Section 1350 Certification of Paul A. Lang.
32.2	Section 1350 Certification of Matthew C. Giljum.
95	Mine Safety Disclosure Exhibit.
101	The following financial statements from the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020, formatted in Inline XBRL: (1) Consolidated Statement of Operations, (2) Consolidated Statements of Comprehensive Income (Loss), (3) Consolidated Balance Sheets, (4) Consolidated Statements of Cash Flows, (5) Consolidated Statements of Stockholders' Equity and (6) Notes to Consolidated Financial Statements, tagged as blocks of text and including detailed tags.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

* Denotes a management contract or compensatory plan or arrangement.

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Arch Resources, Inc.

By: /s/ Matthew C. Giljum
Matthew C. Giljum
Senior Vice President and Chief Financial Officer (On behalf of the registrant and as Principal Financial Officer)

October 23, 2020

WAIVER LETTER AGREEMENT AND
SECOND AMENDMENT TO CREDIT AGREEMENT

June 17, 2020

VIA EMAIL

Arch Resources, Inc., as Borrower Agent
One CityPlace Drive, Suite 300
St. Louis, MO 63141
Attention: Robert G. Jones

Re: Waiver of Designated Defaults and Second Amendment to Credit Agreement

Ladies and Gentlemen:

Reference is made to that certain Credit Agreement dated April 27, 2017 (as at any time amended, restated, modified or supplemented, the "Credit Agreement"), among **ARCH RESOURCES, INC.**, a Delaware corporation formerly known as Arch Coal, Inc. ("Arch"), the various direct and indirect subsidiaries of Arch identified on the signature pages thereto as "Borrowers" (together with Arch, collectively, "Borrowers", and each individually a "Borrower"), **REGIONS BANK**, as agent (in its capacity as agent, the "Administrative Agent") for certain financial institutions (collectively, the "Lenders"), and the Lenders. Capitalized terms used herein and not otherwise defined herein shall have the meanings ascribed to such terms in the Credit Agreement.

Borrowers have advised Administrative Agent that Borrowers caused the legal name of Simba Group LLC (the "Subject Subsidiary"), a subsidiary of Arch and a Borrower, to be changed to Maidsville Landing Terminal, LLC pursuant to a Certificate of Amendment to Certificate of Formation of Simba Group LLC filed with the Delaware Secretary of State on March 5, 2020 (such name change, the "Name Change"). As you know, Events of Default (collectively, the "Designated Events of Default") resulted from (a) Borrowers' failure to give Administrative Agent prior written notice of the Name Change as required by Section 10.13(b) of the Credit Agreement and in violation of Section 12.1(c) of the Credit Agreement, and (b) Borrowers' failure to give similar notices to Term Loan Agent and PNC Bank, National Association, in its capacity as administrator under the Receivables Purchase Agreement (the "Receivables Administrator"), as required by the Term Loan Agreement and the Receivables Purchase Agreement, respectively, in each case resulting in a default thereunder and a violation of Section 12.1(e)(i) of the Credit Agreement. Borrowers have advised Administrative Agent that, as of the date hereof, all actions with respect to the Name Change have been taken in order to maintain a perfected Lien in favor of each of the Administrative Agent, the Term Loan Agent and the Receivables Administrator, with the priority as described in the Loan Documents, in the assets of the Subject Subsidiary that constitute Collateral.

In addition, Borrowers have advised Administrative Agent that certain Deposit Accounts, Securities Accounts and/or Commodities Accounts that do not constitute Excluded Accounts (each, a "Subject Account") have been formed but are not currently subject to Control Agreements. The Borrowers are in the process of causing the applicable securities intermediaries or other applicable Persons to enter into Control Agreements with respect to the Subject Accounts as required by the Security Agreement (such actions, the "After Acquired Collateral Actions" and any Defaults that have arisen with respect to the failure to take the After Acquired Collateral Actions within the specified time periods in the Security Agreement are referred to herein as the "After Acquired Collateral Defaults"; the After Acquired Collateral Defaults, together with the Designated Events of Default, are referred to herein as the "Designated Defaults").

The Administrative Agent and Required Lenders have agreed to waive the Designated Defaults on the terms and subject to the conditions of this letter agreement (this "Agreement").

NOW, THEREFORE, for TEN DOLLARS ($10.00) in hand paid and other good and valuable consideration, the receipt and sufficiency of which are hereby severally acknowledged, the parties hereto, intending to be legally bound hereby, agree as follows:

1. Waiver of Designated Defaults. On the terms and subject to the conditions contained in this Agreement, each of the Administrative Agent and the Required Lenders hereby waive the Designated Defaults in existence on the date hereof; provided, that, if the After Acquired Collateral Actions are not completed on or prior to July 6, 2020, then the waiver of the After Acquired Collateral Defaults (but not the waiver of the Designated Events of Default) shall be void *ab initio* and a Default or Event of Default, as applicable, shall exist. In no event shall such waiver be deemed to constitute a waiver of (a) any Default or Event of Default other than the Designated Defaults in existence on the date hereof, or (b) any Loan Party's obligation to comply with all the terms and conditions of the Credit Agreement and the other Loan Documents from and after the date hereof. This waiver shall be effective only in this specific instance and for the specific purpose for which it is given, and this waiver shall not entitle Loan Parties to any other or further waiver in any similar or other circumstances.

2. Amendment to Credit Agreement. The Credit Agreement is hereby amended by deleting Section 12.1(c) thereof in its entirety and by substituting in lieu thereof the following:

> (c) Breach of Negative Covenants or Certain Other Covenants. Any of the Loan Parties shall default in the observance or performance of (i) the covenant contained in Section 10.13(b) and such default, solely to the extent capable of cure, shall continue unremedied for a period of thirty (30) days or (ii) any covenant contained in Section 9.1, 9.3 (with respect to the ABL Priority Collateral), 9.5, 9.15, 9.16(f)(i), 9.16(f)(ii), 9.18, Section 10 (other than Section 10.13(b)), or Section 11.

3. Ratification and Reaffirmation. Each Loan Party hereby ratifies and reaffirms the Obligations, each of the Loan Documents to which it is a party, and all of such Loan Party's covenants, duties, indebtedness and liabilities under the Loan Documents to which it is a party.

4. Waiver Fee; Expenses. To induce Administrative Agent and Required Lenders to enter into this Agreement, Borrowers jointly and severally agree to pay to Administrative Agent, for the benefit of each of the consenting Lenders, on the date hereof a fully earned and non-refundable waiver fee in the amount of 0.05% of the aggregate principal amount of the Commitments of the consenting Lenders in immediately available funds (the "Waiver Fee"). Additionally, Borrowers jointly and severally agree to pay all out-of-pocket expenses incurred by the Administrative Agent in connection with the preparation, negotiation, execution, delivery and enforcement of this Amendment and the other documents and instruments referred to herein or contemplated hereby, including, but not limited to, the fees and disbursements of Administrative Agent's legal counsel, in each case, to the extent provided in the Credit Agreement.

5. Acknowledgments and Stipulations. Each Loan Party acknowledges and stipulates that this Agreement and each other Loan Document to which such Loan Party is party constitutes a legal, valid and binding obligation of such Loan Party that is enforceable against such Loan Party in accordance with the terms hereof or thereof, as applicable, except to the extent that enforceability of any portion hereof or thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforceability of creditors' rights generally or limiting the right of specific performance; that all of the Obligations are owing and payable, in each case to the extent provided in the Loan Documents, without defense, offset or counterclaim (and to the extent there exists any such defense, offset or counterclaim on the date hereof, the same is hereby knowingly and voluntarily waived by each Loan Party); and that the security interests and Liens granted by such Loan Party in favor of Administrative Agent are fully perfected first priority security interests and Liens (subject only to Permitted Liens) in and to the assets of the Loan Parties that constitute ABL Priority Collateral and second priority Liens (subject only to Permitted Liens) in and to the assets of the Loan Parties that constitute Term Loan Priority Collateral (in each case, subject to any remaining actions that may be required in accordance with Section 9.20 of the Credit Agreement).

6. Representations and Warranties. Each Loan Party represents and warrants to Administrative Agent and Required Lenders, to induce each to enter into this Agreement, that no Default or Event of Default (other than the Designated Defaults) exists on the date hereof; that the execution, delivery and performance of this Agreement have been duly authorized by all requisite corporate or company action on the part of such Loan Party and this Agreement has been duly executed and delivered by such Loan Party; and that all of the representations and warranties made by such Loan Party in the Credit Agreement are true and correct in all material respects on the effective date hereof (provided that any representation or warranty that is qualified as to "materiality," "Material Adverse Change" or similar language shall be true and correct (after giving effect to such qualification) in all respects on such effective date), except for those representations and warranties that expressly relate to an earlier date, in which case, they shall have been true and correct in all material respects as of such earlier date.

7. No Novation, etc. Except as otherwise expressly provided in this Agreement, nothing herein shall be deemed to amend or modify any provision of the Credit Agreement or any of the other Loan Documents, each of which shall remain in full force and effect. This Agreement is not intended to be, nor shall it be construed to create, a novation or accord and satisfaction, and the Credit Agreement as herein modified shall continue in full force and effect. Upon the effectiveness of this Agreement, each reference in the Credit Agreement to "this Agreement," "hereunder," or words of like import shall mean and be a reference to the Credit Agreement, as amended by this Amendment.

8. Release of Claims. In consideration of Administrative Agent's and Required Lenders' agreement to waive the Designated Defaults, each Loan Party hereby RELEASES, ACQUITS AND FOREVER DISCHARGES Administrative Agent, each LC Issuer and each Lender, and each of their respective officers, directors, agents, employees, representatives, Affiliates and trustees and any successors and assigns of any of the foregoing (each, a "Releasee", and collectively, the "Releasees"), from any and all liabilities, claims, demands, actions or causes of action of any kind or nature (if there be any), whether absolute or contingent, disputed or undisputed, at law or in equity, or known or unknown, that any Loan Party now has or ever had against any of the Releasees arising under or in connection with the Loan Documents, based in whole or in part on facts, whether or not now known, existing on or before the date of this Agreement (collectively, "Claims"). Each Loan Party hereby represents and warrants to the Releasees that no Loan Party has transferred or assigned to any person or entity of any kind any Claim that such Loan Party ever had or claimed to have against any Releasee.

9. Miscellaneous. The waiver and amendment contained herein shall not be effective until Administrative Agent shall have received (i) a counterpart hereof duly executed by Borrower Agent, on behalf of the Loan Parties, at which time this Agreement shall constitute an agreement among the parties hereto with respect to the agreements contained herein, (ii) evidence reasonably satisfactory to the Administrative Agent that waivers by the requisite consenting parties have been obtained with respect to any events of default or termination events existing under the Term Loan Agreement and the Receivables Purchase Agreement as a result of the Name Change, and (iii) the Waiver Fee. THIS AGREEMENT SHALL BE GOVERNED BY

THE LAWS OF THE STATE OF NEW YORK, WITHOUT GIVING EFFECT TO ANY CONFLICT OF LAW PRINCIPLES OR OTHER RULE OF LAW WHICH WOULD CAUSE THE APPLICATION OF THE LAW OF ANY JURISDICTION OTHER THAN THE LAW OF THE STATE OF NEW YORK. This Agreement may be executed in any number of counterparts and by different parties to this Agreement on separate counterparts, each of which, when so executed, shall be deemed an original, but all such counterparts shall constitute one and the same agreement. Any manually executed signature page to this Agreement delivered by a party by facsimile or other electronic transmission shall be deemed to be an original signature hereto. Section titles and references used in this Agreement shall be without substantive meaning or content of any kind whatsoever and are not a part of the agreements among the parties hereto. **To the fullest extent permitted by applicable law, each party hereby waives the right to trial by jury in any action, suit, counterclaim or proceeding arising out of or related to this Agreement**.

[*Remainder of page intentionally left blank.*]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed under seal and delivered by their respective duly authorized officers as of the date first written above.

Very truly yours,

REGIONS BANK
as Administrative Agent and as the sole Lender

By: /s/ Mark A. Kassis
Name: Mark A. Kassis
Title: Managing Director

Acknowledged and agreed to:

ARCH RESOURCES, INC.
as Borrower Agent, on behalf of Loan Parties

By: /s/ Robert G. Jones
Name: Robert G. Jones
Title: Senior Vice President – Law, General Counsel
and Secretary

THIRD AMENDMENT TO CREDIT AGREEMENT

THIS THIRD AMENDMENT TO CREDIT AGREEMENT (this "Amendment") is made and entered into on September 30, 2020, by and among **ARCH RESOURCES, INC.**, a Delaware corporation ("Arch"), the direct and indirect subsidiaries of Arch identified on the signature pages hereto as "Borrowers" (together with Arch, collectively, "Borrowers", and each individually a "Borrower"), **REGIONS BANK**, as agent (in its capacity as agent, the "Administrative Agent") for certain financial institutions (collectively, the "Lenders"), and the Lenders.

Recitals:

Borrowers, Administrative Agent and Lenders are parties to a certain Credit Agreement dated April 27, 2017 (as at any time amended, restated, modified or supplemented, the "Credit Agreement"), pursuant to which Lenders have made certain loans and other financial accommodations to Borrowers.

Borrowers, Administrative Agent and Lenders desire to amend the Credit Agreement to, among other things, extend the Stated Commitment Termination Date (as defined in the Credit Agreement), all on the terms and subject to the conditions hereinafter set forth.

NOW, THEREFORE, for TEN DOLLARS ($10.00) in hand paid and other good and valuable consideration, the receipt and sufficiency of which are hereby severally acknowledged, the parties hereto, intending to be legally bound hereby, agree as follows:

1. Definitions. Capitalized terms used in this Amendment, unless otherwise defined herein, have the respective meanings ascribed to such terms in the Credit Agreement.

2. Amendments to Credit Agreement. The Credit Agreement is hereby amended as follows:

(a) By adding the following new definitions to Section 1.1 of the Credit Agreement in the appropriate alphabetical order:

> "Advance Rate (Coal Inventory)" means a percentage equal to (i) during any Borrowing Base Adjustment Period (Level 2), 75%, (ii) during any Borrowing Base Adjustment Period (Level 3), 60%, (iii) during any Borrowing Base Adjustment Period (Level 4) or Borrowing Base Adjustment Period (Level 5), 45%, and (iv) at all other times, 85%.
>
> "Benchmark Replacement" means the sum of: (a) the alternate benchmark rate that has been selected by Administrative Agent and the Borrower Agent after giving due consideration to (i) any selection or recommendation of a replacement benchmark rate or the mechanism for determining such a rate by the Relevant Governmental Body or (ii) any evolving or then-prevailing market convention for determining a benchmark rate of interest as a replacement to LIBOR for U.S. dollar-denominated syndicated credit facilities and (b) the Benchmark Replacement Adjustment; provided that, if the Benchmark Replacement as so determined would be less than 0.75% (75 bps) per annum, then, the Benchmark Replacement will be deemed to be 0.75% (75 bps) per annum for purposes of this Agreement.

"Benchmark Replacement Adjustment" means, with respect to any replacement of LIBOR with an Unadjusted Benchmark Replacement for each applicable Interest Period, the spread adjustment, or method for calculating or determining such spread adjustment (which may be a positive or negative value or zero), that has been selected by Administrative Agent and the Borrower Agent after giving due consideration to (i) any selection or recommendation of a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of LIBOR with the applicable Unadjusted Benchmark Replacement by the Relevant Governmental Body or (ii) any evolving or then-prevailing market convention for determining a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of LIBOR with the applicable Unadjusted Benchmark Replacement for U.S. dollar-denominated syndicated credit facilities at such time.

"Benchmark Replacement Conforming Changes" means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the definition of "Adjusted LIBOR Rate," the definition of "Base Rate," the definition of "LIBOR," the definition of "LIBOR Index Rate," the definition of "Interest Period," the timing and frequency of determining rates and making payments of interest, timing of borrowing requests or prepayment, conversion or continuation notices, length of lookback periods, the applicability of breakage provisions and other technical, administrative or operational matters) that Administrative Agent decides may be appropriate to reflect the adoption and implementation of such Benchmark Replacement and to permit the administration thereof by Administrative Agent in a manner substantially consistent with market practice (or, if Administrative Agent decides that adoption of any portion of such market practice is not administratively feasible or if Administrative Agent determines that no market practice for the administration of the Benchmark Replacement exists, in such other manner of administration as Administrative Agent decides is reasonably necessary in connection with the administration of this Agreement).

"Benchmark Replacement Date" means the earliest to occur of the following events with respect to LIBOR:

(1) in the case of clause (1) or (2) of the definition of "Benchmark Transition Event," the later of (a) the date of the public statement or publication of information referenced therein and (b) the date on which the administrator of LIBOR permanently or indefinitely ceases to provide LIBOR;

(2) in the case of clause (3) of the definition of "Benchmark Transition Event," the date of the public statement or publication of information referenced therein; or

(3) in the case of an Early Opt-In Election, the sixth (6th) Business Day after the notice of such Early Opt-In Election is provided to the Lenders, so long as the Administrative Agent has not received, by 5:00 p.m. (New York City time) on the fifth (5th) Business Day after the date notice of such Early Opt-In Election is provided to the Lenders, written notice of objection to such Early Opt-In Election from Lenders comprising the Required Lenders.

"Benchmark Transition Event" means the occurrence of one or more of the following events with respect to LIBOR:

(1) a public statement or publication of information by or on behalf of the administrator of LIBOR announcing that such administrator has ceased or will cease to provide LIBOR, permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide LIBOR;

(2) a public statement or publication of information by the regulatory supervisor for the administrator of LIBOR, the U.S. Federal Reserve System, an insolvency official with jurisdiction over the administrator for LIBOR, a resolution authority with jurisdiction over the administrator for LIBOR or a court or an entity with similar insolvency or resolution authority over the administrator for LIBOR, that states that the administrator of LIBOR has ceased or will cease to provide LIBOR permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide LIBOR; or

(3) a public statement or publication of information by the regulatory supervisor for the administrator of LIBOR announcing that LIBOR is no longer representative.

"Benchmark Unavailability Period" means the period (if any) (x) beginning at the time that a Benchmark Replacement Date pursuant to clauses (1) or (2) of that definition has occurred if, at such time, no Benchmark Replacement has replaced LIBOR for all purposes hereunder in accordance with Section 15.1(h) and (y) ending at the time that a Benchmark Replacement has replaced LIBOR for all purposes hereunder pursuant to Section 15.1(h).

"Borrowing Base Adjustment Period (Level 2)" means the first day on which Administrative Agent receives any Borrowing Base Certificate indicating that Liquidity has fallen below $200,000,000 (but is equal to or greater than $175,000,000) at any time (an "Initial Level 2 Adjustment Event"), and all subsequent days in which Liquidity is less than $200,000,000 but equal to or greater than $175,000,000 as shown on the most recent Borrowing Base Certificate received by Administrative Agent.

"Borrowing Base Adjustment Period (Level 3)" means the first day on which Administrative Agent receives any Borrowing Base Certificate indicating that Liquidity has fallen below $175,000,000 (but is equal to or greater than $150,000,000) at any time (an "Initial Level 3 Adjustment Event"), and all subsequent days in which Liquidity is less than $175,000,000 but equal to or greater than $150,000,000 as shown on the most recent Borrowing Base Certificate received by Administrative Agent.

"Borrowing Base Adjustment Period (Level 4)" means the first day on which Administrative Agent receives any Borrowing Base Certificate indicating that Liquidity has fallen below $150,000,000 (but is equal to or greater than $125,000,000) at any time (an "Initial Level 4 Adjustment Event"), and all subsequent days in which Liquidity is less than $150,000,000 but equal to or greater than $125,000,000 as shown on the most recent Borrowing Base Certificate received by Administrative Agent.

"Borrowing Base Adjustment Period (Level 5)" means the first day on which Administrative Agent receives any Borrowing Base Certificate or other notice indicating that Liquidity has fallen below $125,000,000 at any time (an "Initial Level 5 Adjustment

Event”), and all subsequent days in which Liquidity is less than $125,000,000 as shown on the most recent Borrowing Base Certificate received by Administrative Agent.

“Commitment Fee Percentage” means the sum of (i)(A) with respect to any calendar month during which the average amount of the Aggregate Revolving Obligations (other than Swingline Loans) on each day during such calendar month exceeded fifty percent (50%) of the aggregate amount of the Commitments on each day during such calendar month, 0.50% (50 bps) per annum and (B) with respect to any other calendar month, 0.75% (75 bps) per annum, plus (ii) if the Specified Cash Balance is less than $15,000,000 as of the last date of the calendar month preceding a Determination Date (or, on or after the Third Amendment Effective Date but prior to the next Determination Date, as of the Third Amendment Effective Date), 0.375% (37.5 bps) per annum.

“Convertible Indebtedness” means Indebtedness of Parent permitted to be incurred under the terms of this Agreement that is either (a) convertible into common stock of Parent (and cash in lieu of fractional shares) and/or cash (in an amount determined by reference to the price of such common stock) and/or any combination thereof or (b) sold as units with call options, warrants or rights to purchase (or substantially equivalent derivative transactions) that are exercisable for common stock of Parent and/or cash (in an amount determined by reference to the price of such common stock).

“Early Opt-in Election” means the occurrence of:

(1) a notification by the Administrative Agent to (or the request by the Borrower Agent to the Administrative Agent to notify) each of the other parties hereto that at least five currently outstanding U.S. dollar-denominated syndicated credit facilities at such time, contain (as a result of amendment or as originally executed) a new benchmark interest rate to replace LIBOR, and

(2) the joint election by Administrative Agent and the Borrower Agent to trigger a fallback from LIBOR and the provision by the Administrative Agent of written notice of such election to the Lenders.

“NIB Account” means a non-interest bearing Deposit Account maintained by Borrowers at Regions Bank.

“NIB Account Cash” means cash of Borrowers on deposit from time to time in a NIB Account over which Administrative Agent has first priority Article 9 Control; provided that NIB Account Cash shall not include any Eligible Cash.

“Permitted Bond Hedge Transaction” means any call or capped call option (or substantively equivalent derivative transaction) on Parent’s common stock purchased by Parent in connection with the issuance of any Convertible Indebtedness and not for speculative purposes; provided that the purchase price for such Permitted Bond Hedge Transaction, less the proceeds received by Parent from the sale of any related Permitted Warrant Transaction, does not exceed the net proceeds received by Parent from the sale of such Convertible Indebtedness issued in connection with the Permitted Bond Hedge Transaction.

“Permitted Warrant Transaction” means any call option, warrant or right to purchase (or substantively equivalent derivative transaction) on Parent’s common stock sold by Parent substantially concurrently with any purchase by Parent of a related Permitted Bond Hedge Transaction and not entered into for speculative purposes.

"Relevant Governmental Body" means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto.

"Reported Eligible Cash" means, on any date, any Eligible Cash that Borrowers included in the calculation of the Borrowing Base set forth in the most recent Borrowing Base Certificate delivered to Administrative Agent hereunder.

"Specified Cash Balance" means, on any date of determination, the sum of (i) the aggregate amount of NIB Account Cash on such date plus (ii) the aggregate amount of Eligible Cash on such date.

"Third Amendment Effective Date" means September 30, 2020.

"Unadjusted Benchmark Replacement" means the Benchmark Replacement excluding the Benchmark Replacement Adjustment.

(b) By deleting the definitions of "Adjusted LIBOR Rate," "Cash Collateralize," "Eligible Cash," "LC Sublimit," "Liquidity" and "Stated Commitment Termination Date" in Section 1.1 of the Credit Agreement and by substituting in lieu thereof the following:

"Adjusted LIBOR Rate" means, for any Interest Rate Determination Date with respect to an Interest Period for a LIBOR Loan, the rate per annum obtained by dividing (a) (i) the rate per annum (rounded upward to the next whole multiple of one sixteenth of one percent (1/16 of 1%)) equal to the LIBOR, as published on the applicable Reuters screen page (or such other commercially available source providing such quotations as may be designated by the Administrative Agent from time to time) for deposits (for delivery on the first day of such period) with a term equivalent to such period in Dollars, determined as of approximately 11:00 a.m. (London, England time) on such Interest Rate Determination Date, or (ii) in the event the rate referenced in the preceding clause (i) does not appear on such page or service or if such page or service shall cease to be available, the rate per annum (rounded upward to the next whole multiple of one sixteenth of one percent (1/16 of 1%)) equal to the rate determined by the Administrative Agent to be the offered rate on such other page or other service which displays an average settlement rate for deposits (for delivery on the first day of such period) with a term equivalent to such period in Dollars, determined as of approximately 11:00 a.m. (London, England time) on such Interest Rate Determination Date, by (b) an amount equal to the number one minus the Applicable Reserve Requirement. Notwithstanding anything contained herein to the contrary, if the Adjusted LIBOR Rate, as so determined, is ever less than 0.75% (75 bps) per annum, then, the Adjusted LIBOR Rate shall be deemed to be 0.75% (75 bps) per annum.

"Eligible Cash" means cash of Borrowers on deposit from time to time in a Deposit Account maintained at Regions Bank over which Administrative Agent has (a) first priority Article 9 Control and (b) exclusive control to withdraw or otherwise direct the disposition of funds on deposit therein; provided that Eligible Cash shall not include any NIB Account Cash.

"LC Sublimit" means $50,000,000, subject to any increase, adjustment or reduction pursuant to the terms and conditions hereof (including reductions from time to time pursuant to Section 2.1(g)).

"Liquidity" means, as of any date of determination, the sum of, without duplication, (a) unrestricted cash or Permitted Investments as of such date of the Parent and its Subsidiaries (other than the Securitization Subsidiaries and Bonding Subsidiaries) that are not Foreign Subsidiaries and (x) excluding any Reported Eligible Cash (including any Remedial Eligible Cash that constitutes Reported Eligible Cash), any Remedial Eligible Cash (regardless of whether such Remedial Eligible Cash is Reported Eligible Cash) which must be included in the Borrowing Base on such date to prevent an Overadvance from existing, and any Cash Collateral required to be delivered by Borrowers to Administrative Agent, LC Issuer, Swingline Lender or any other Lender, as applicable, pursuant to this Agreement or any other Loan Document and (y) including any NIB Account Cash and any Eligible Cash not expressly excluded from Liquidity pursuant to clause (x) above; (b) withdrawable funds from brokerage accounts of Borrowers as of such date; (c) Availability as of such date; and (d) any unused commitments that are available to be drawn as of such date by the Parent pursuant to the terms of any Permitted Receivables Financing.

"Stated Commitment Termination Date" means September 30, 2023.

(c) By deleting the references to "$275,000,000" set forth in the definition of "Account Control Period" in Section 1.1 of the Credit Agreement and by substituting in lieu thereof, in each case, a reference to "$250,000,000."

(d) By deleting the first paragraph of the definition of "Applicable Margin" in Section 1.1 of the Credit Agreement and the table that immediately follows such paragraph and by substituting in lieu thereof the following:

"Applicable Margin" means, subject to the terms of this definition, with respect to any Type of Loan and at any time of determination, a percentage rate per annum equal to the sum of (i) the percentage rate per annum set forth in the following table, as determined by reference to Liquidity as of the last date of the calendar month preceding each Determination Date (as defined below), as further described below, plus (ii) if the Specified Cash Balance is less than $15,000,000 as of the last date of the calendar month preceding a Determination Date (or, on or after the Third Amendment Effective Date but prior to the next Determination Date, as of the Third Amendment Effective Date), 0.375% (37.5 bps) per annum:

Level	Liquidity	Loans		
		Base Rate	LIR	LIBOR
I	Less than $200,000,000	2.50%	3.50%	3.50%
II	Greater than or equal to $200,000,000 but less than $275,000,000	2.00%	3.00%	3.00%
III	Greater than or equal to $275,000,000	1.50%	2.50%	2.50%

(e) By deleting in its entirety the first sentence of the third paragraph of the definition of “Applicable Margin” in Section 1.1 of the Credit Agreement.

(f) By deleting the last sentence of the definition of “Base Rate” in Section 1.1 of the Credit Agreement and by substituting in lieu thereof the following:

> Notwithstanding anything contained herein to the contrary, if the Base Rate, as so determined, is ever less than 0.75% (75 bps) per annum, then, the Base Rate shall be deemed to be 0.75% (75 bps) per annum.

(g) By deleting the reference to “85%” set forth in clause (a) of the definition of “Borrowing Base” in Section 1.1 of the Credit Agreement and by substituting in lieu thereof a reference to “the Advance Rate (Coal Inventory).”

(h) By deleting clause (c) of the definition of “Borrowing Base” in Section 1.1 of the Credit Agreement and by substituting in lieu thereof the following:

> (c) 100% of the sum of, without duplication, (i) Reported Eligible Cash plus (ii) any Remedial Eligible Cash which is necessary to include in the Borrowing Base on such date to prevent an Overadvance from existing; minus

(i) By deleting each use of the term “Borrowing Base Adjustment Period” (including, without limitation, at the start of the definition of such term set forth in Section 1.1 of the Credit Agreement) and by substituting in lieu thereof, in each case, a reference to “Borrowing Base Adjustment Period (Level 1).”

(j) By deleting the phrase “subject to any increase, adjustment or reduction pursuant to the terms and conditions hereof” set forth in the definition of “Commitments” in Section 1.1 of the Credit Agreement and by substituting in lieu thereof the phrase “subject to any increase, adjustment or reduction pursuant to the terms and conditions hereof (including reductions from time to time pursuant to Section 2.1(g)).”

(k) By deleting the last sentence of the definition of “Federal Funds Rate” in Section 1.1 of the Credit Agreement and by substituting in lieu thereof the following:

> Notwithstanding anything contained herein to the contrary, if the Federal Funds Rate, as so determined, is ever less than 0.75% (75 bps) per annum, then, the Federal Funds Rate shall be deemed to be 0.75% (75 bps) per annum.

(l) By deleting the definitions of “LIBOR Replacement Rate” and “LIBOR Scheduled Unavailability Date” in Section 1.1 of the Credit Agreement in their entireties.

(m) By adding the following parenthetical immediately prior to the period at the end of the definition of “Overadvance” in Section 1.1 of the Credit Agreement:

> (including any such amount arising as a result of the commencement of a Borrowing Base Adjustment Period (Level 1), Borrowing Base Adjustment Period (Level 2), Borrowing Base Adjustment Period (Level 3), Borrowing Base Adjustment Period (Level 4) or Borrowing Base Adjustment Period (Level 5))

(n) By adding the following sentence to the end of the definition of "Prime Rate" in Section 1.1 of the Credit Agreement:

> Notwithstanding anything contained herein to the contrary, if the Prime Rate, as so determined, is ever less than 0.75% (75 bps) per annum, then, the Prime Rate shall be deemed to be 0.75% (75 bps) per annum.

(o) By adding the following proviso to the end of the first sentence of Section 2.1(a) of the Credit Agreement:

> ; provided, however, that at any time that the Borrowing Base includes any Eligible Cash (as set forth on the most recent Borrowing Base Certificate delivered by Borrowers to Administrative Agent), no Lender shall be obligated to make any Loans to Borrowers and, subject to all conditions set forth herein, the only extensions of credit required to be provided hereunder shall be in the form of Letters of Credit issued by LC Issuer

(p) By deleting Section 2.1(d)(ii) of the Credit Agreement in its entirety and by substituting in lieu thereof the following:

> (ii) Any Overadvance shall (A) be immediately due and payable **ON DEMAND** and, once paid to Administrative Agent, shall be applied, first, to the payment of any Swingline Loans; second, to all Loans which are Base Rate Loans or LIR Loans; third to Loans which are LIBOR Loans; and, fourth, to Cash Collateralize the LC Obligations; provided that, immediately upon the occurrence of an Overadvance caused by the reduction of the Advance Rate (Coal Inventory) at the commencement of a Borrowing Base Adjustment Period (Level 2), Borrowing Base Adjustment Period (Level 3), Borrowing Base Adjustment Period (Level 4), or Borrowing Base Adjustment Period (Level 5) (each, an "Applicable Borrowing Base Adjustment Period"), Borrowers may elect, in lieu of such payment, to deposit Eligible Cash in an amount equal to the amount of such Overadvance (any Eligible Cash deposited for such purpose, "Remedial Eligible Cash"); (B) constitute Obligations secured by the Collateral; and (C) be entitled to all benefits of the Loan Documents. Any Remedial Eligible Cash must remain Eligible Cash until the date that both of the following are true (such date, the "Remedial Eligible Cash Release Date"): (i) at least 120 days have passed since Borrowers' deposit of such Remedial Eligible Cash and (ii) the most recent Borrowing Base Certificates received by Administrative Agent indicate that Liquidity has exceeded relevant Liquidity Threshold Amount (as defined below) for a period of at least thirty (30) consecutive days. As used herein, the term "Liquidity Threshold Amount" means (I) with respect to any Remedial Eligible Cash deposited in connection with a Borrowing Base Adjustment Period (Level 2), $200,000,000, (II) with respect to any Remedial Eligible Cash deposited in connection with a Borrowing Base Adjustment Period (Level 3), $175,000,000, (III) with respect to any Remedial Eligible Cash deposited in connection with a Borrowing Base Adjustment Period (Level 4), $150,000,000, and (IV) with respect to any Remedial Eligible Cash deposited in connection with a Borrowing Base Adjustment Period (Level 5), $125,000,000. After the Remedial Eligible Cash Release Date for particular Remedial Eligible Cash, upon receipt of Borrowers' written request and so long as no Event of Default then exists, Administrative Agent shall direct disposition to Borrowers of Eligible Cash in an amount equal to such Remedial Eligible Cash.

(q) By deleting the reference to "$5,000,000" set forth in Section 2.1(d)(iii) of the Credit Agreement and by substituting in lieu thereof a reference to "ten percent (10%) of the aggregate amount of the Commitments."

(r) By adding the following new Section 2.1(g) to the Credit Agreement immediately after Section 2.1(f) thereof:

> (g) Decreases to Commitments and LC Sublimit. The Commitments and the LC Sublimit will reduce permanently (subject to any later Commitment Increase effectuated pursuant to the immediately preceding clause (f)) and automatically as follows:
>
> > (i) Upon the commencement of any Borrowing Base Adjustment Period (Level 2) and so long as the Commitments or the LC Sublimit, as applicable, have not previously been reduced to an amount equal to or less than such amount, the Commitments and the LC Sublimit will reduce permanently and automatically to $45,000,000 and each Lender's Commitment shall be permanently and automatically reduced to an amount equal to its Pro Rata Share of such reduced Commitments;
> >
> > (ii) Upon the commencement of any Borrowing Base Adjustment Period (Level 3) and so long as the Commitments or the LC Sublimit, as applicable, have not previously been reduced to an amount equal to or less than such amount, the Commitments and the LC Sublimit will reduce permanently and automatically to $40,000,000 and each Lender's Commitment shall be permanently and automatically reduced to an amount equal to its Pro Rata Share of such reduced Commitments; and
> >
> > (iii) Upon the commencement of any Borrowing Base Adjustment Period (Level 4) and so long as the Commitments or the LC Sublimit, as applicable, have not previously been reduced to an amount equal to or less than such amount, the Commitments and the LC Sublimit will reduce permanently and automatically to $35,000,000 and each Lender's Commitment shall be permanently and automatically reduced to an amount equal to its Pro Rata Share of such reduced Commitments.

(s) By deleting the reference to "0.375% per annum" set forth in Section 3.2(b) of the Credit Agreement and by substituting in lieu thereof a reference to "the Commitment Fee Percentage applicable with respect to the immediately preceding calendar month."

(t) By deleting clauses (i) and (ii) of Section 9.5(b) of the Credit Agreement (but not the proviso that follows clause (ii) of such section) and by substituting in lieu thereof the following:

> (i) field examinations of any Loan Party's or Subsidiary's books and records or any other financial or Collateral matters as Administrative Agent deems appropriate, up to two times per Fiscal Year and (ii) appraisals of Inventory, up to two times time per Fiscal Year

(u) By deleting Section 9.16(f)(iii) of the Credit Agreement in its entirety and by substituting in lieu thereof the following:

(iii) promptly after any Senior Officer of any Borrower has learned that Liquidity no longer equals or exceeds $125,000,000;

(v) By deleting Section 10.1(m) of the Credit Agreement in its entirety and by substituting in lieu thereof the following:

(m) Debt (i) in respect of Swap Agreements entered into in the ordinary course of business consistent with past practice, (ii) in connection with a Permitted Bond Hedge Transaction or Permitted Warrant Transaction or (iii) arising from the honoring by a bank or other financial institution of a check, draft or similar instrument drawn against insufficient funds or other cash management services including, but not limited to, treasury, depository, overdraft, credit or debit card, electronic funds transfer and other cash management arrangements, in each case entered into or arising in the ordinary course of business;

(w) By deleting the word "or" at the end of Section 10.8(d) of the Credit Agreement, by deleting the period at the end of Section 10.8(e) of the Credit Agreement and substituting in lieu thereof a semicolon followed by the word "or," and by adding the following new subsection (f) to Section 10.8 to the Credit Agreement immediately after Section 10.8(e):

(f) (i) any payments in connection with a Permitted Bond Hedge Transaction and (ii) the settlement of any related Permitted Warrant Transaction (A) by delivery of shares of Parent's common stock upon settlement thereof or (B) by (1) set-off against the related Permitted Bond Hedge Transaction or (2) payment of an early termination amount thereof in common stock upon any early termination thereof.

(x) By deleting the first parenthetical phrase in Section 10.9(a) of the Credit Agreement and by substituting in lieu thereof the following:

(excluding, for the avoidance of doubt, permitted unsecured Debt, permitted Convertible Indebtedness, any Permitted Receivables Financing and the Term Loan Obligations)

(y) By deleting Section 10.11(g) of the Credit Agreement in its entirety and by substituting in lieu thereof the following:

(g) other Investments so long as both immediately before and immediately after giving effect to any such Investment under this clause (g), Liquidity equals or exceeds $175,000,000;

(z) By deleting Section 11.1(a) of the Credit Agreement in its entirety and by substituting in lieu thereof the following:

(a) Minimum Liquidity. At all times, Borrowers shall cause (i) Liquidity to equal or exceed $100,000,000 and (ii) the portion of Liquidity consisting of unrestricted cash or Permitted Investments of the Parent and its Subsidiaries (other than the Securitization Subsidiaries and Bonding Subsidiaries) that are not Foreign Subsidiaries to equal or exceed $90,000,000.

(aa) By deleting Section 15.1(a) of the Credit Agreement in its entirety and by substituting in lieu thereof the following:

(a) Inability to Determine Applicable Interest Rate. In the event that Administrative Agent shall have determined (which determination shall be final and conclusive and binding upon all parties hereto), with respect to any LIBOR Loans or LIR Loans, that by reason of circumstances affecting the London interbank market adequate and fair means do not exist for ascertaining the interest rate applicable to such LIBOR Loans or LIR Loans on the basis provided for in the definition of Adjusted LIBOR Rate or LIBOR Index Rate, as applicable (provided that no Benchmark Transition Event shall have occurred at such time), Administrative Agent shall on such date give notice to Borrower Agent and each Lender of such determination, whereupon (A) no Loans may be made as, or converted to, LIBOR Loans or LIR Loans until such time as Administrative Agent notifies Borrower Agent and Lenders that the circumstances giving rise to such notice no longer exist, and (B) any Notice of Borrowing or Notice of Conversion/Continuation given by Borrowers with respect to the Loans in respect of which such determination was made shall be deemed to be rescinded by Borrowers and such Loans shall be automatically made or continued as, or converted to, as applicable, Base Rate Loans without reference to the Adjusted LIBOR Rate component of the Base Rate.

(bb) By deleting Section 15.1(h) of the Credit Agreement in its entirety and by substituting in lieu thereof the following:

(h) Benchmark Transition Event. Notwithstanding anything to the contrary contained in this Agreement or any other Loan Document, but without limiting subsections (b) of this Section 15.1, upon the occurrence of a Benchmark Transition Event or an Early Opt-in Election, as applicable, and its related Benchmark Transition Event, Administrative Agent and the Borrower Agent may amend this Agreement to replace LIBOR with a Benchmark Replacement. Any such amendment with respect to a Benchmark Transition Event will become effective at 5:00 p.m. on the fifth (5th) Business Day after Administrative Agent has posted such proposed amendment to all Lenders, so long as Administrative Agent has not received, by such time, written notice of objection to such amendment from Lenders comprising at such time the Required Lenders. Any such amendment with respect to an Early Opt-in Election will become effective on the date that Lenders comprising the Required Lenders have delivered written notice to Administrative Agent that such Required Lenders accept such amendment. No replacement of LIBOR with a Benchmark Replacement pursuant hereto will occur prior to the applicable Benchmark Replacement Date. In connection with the implementation of a Benchmark Replacement, Administrative Agent will have the right to make Benchmark Replacement Conforming Changes from time to time and, notwithstanding anything to the contrary herein or in any other Loan Document, any amendments to any Loan Documents implementing such Benchmark Replacement Conforming Changes will become effective without any further action or consent of any other party to this Agreement. Administrative Agent will promptly notify the Borrower Agent and the Lenders of (i) any occurrence of a Benchmark Transition Event or an Early Opt-in Election, as applicable, and its related Benchmark Replacement Date, (ii) the implementation of any Benchmark Replacement, (iii) the effectiveness of any Benchmark Replacement Conforming Changes, and (iv) the commencement or conclusion of any Benchmark Unavailability Period. Any determination, decision or election that may be made by Administrative Agent or Lenders pursuant to this Section, including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action, will be conclusive and binding absent manifest error on all parties and may be made in its or their sole discretion and without consent from any other party hereto, except, in each case, as expressly may be required pursuant to this Section. Upon the Borrower

Agent's receipt of notice of the commencement of a Benchmark Unavailability Period, the Borrower Agent may revoke any request for a Borrowing of a LIBOR Rate Loan or, conversion to or continuation of a LIBOR Rate Loan to be made, converted or continued during any Benchmark Unavailability Period, provided, that, in the event that the Borrower Agent does not revoke such request or does not revoke such request in the time or manner required herein, then, any such request shall be deemed to be a request for a Borrowing of, or conversion to, a Base Rate Loan. During any Benchmark Unavailability Period, any component of the Base Rate based upon LIBOR will not be used in any determination of the Base Rate.

(cc) By deleting each reference to "Arch Coal, Inc." in the Credit Agreement and the other Loan Documents and by substituting in lieu thereof, in each case, a reference to "Arch Resources, Inc., formerly known as Arch Coal, Inc."

(dd) By deleting Exhibit E to the Credit Agreement in its entirety and by substituting in lieu thereof the replacement exhibit attached hereto as Annex A.

3. Ratification and Reaffirmation. Each Borrower hereby ratifies and reaffirms the Obligations, each of the Loan Documents, and all of such Borrower's covenants, duties, indebtedness and liabilities under the Loan Documents.

4. Acknowledgments and Stipulations. Each Borrower acknowledges and stipulates that this Amendment and each other Loan Document to which such Borrower is party constitutes a legal, valid and binding obligation of such Borrower that is enforceable against such Borrower in accordance with the terms hereof or thereof, as applicable, except to the extent that enforceability of any portion hereof or thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforceability of creditors' rights generally or limiting the right of specific performance; that all of the Obligations are owing and payable, in each case to the extent provided in the Loan Documents, without defense, offset or counterclaim (and to the extent there exists any such defense, offset or counterclaim on the date hereof, the same is hereby knowingly and voluntarily waived by each Borrower); that the security interests and Liens granted by such Borrower in favor of Administrative Agent are fully perfected first priority security interests and Liens (subject only to Permitted Liens) in and to the assets of the Loan Parties that constitute ABL Priority Collateral and second priority Liens (subject only to Permitted Liens) in and to the assets of the Loan Parties that constitute Term Loan Priority Collateral (in each case, subject to any remaining actions that may be required in accordance with Section 9.20 of the Credit Agreement); that the unpaid principal amount of the Loans and outstanding Letters of Credit on and as of September 29, 2020, totaled $29,195,746.00; and that the Applicable Margin and the Commitment Fee Percentage will increase as provided in the Credit Agreement (after giving effect to this Amendment) when this Amendment becomes effective unless the Specified Cash Balance (as defined in the Credit Agreement after giving effect to this Amendment) at such time equals or exceed $15,000,000.

5. Representations and Warranties. Each Borrower represents and warrants to Administrative Agent and the Lenders, to induce each to enter into this Amendment, that no Default or Event of Default exists on the date hereof; that the execution, delivery and performance of this Amendment have been duly authorized by all requisite corporate or company action on the part of such Borrower and this Amendment has been duly executed and delivered by such Borrower; and that all of the representations and warranties made by such Borrower in the Credit Agreement are true and correct in all material respects on the effective date hereof (provided that any representation or warranty that is qualified as to "materiality," "Material Adverse Change" or similar language shall be true and correct (after giving effect to such qualification) in all respects on such effective date), except for those representations and warranties that expressly relate to an earlier date, in which case, they shall have been true and correct in all material respects as of such earlier date.

6. **Reference to Credit Agreement.** Upon the effectiveness of this Amendment, each reference in the Credit Agreement to "this Agreement," "hereunder," or words of like import shall mean and be a reference to the Credit Agreement, as amended by this Amendment.

7. **Loan Document Pursuant to Credit Agreement.** This Amendment is a Loan Document executed pursuant to the Credit Agreement and shall be construed, administered and applied in accordance with all of the terms and provisions of the Credit Agreement. A breach of any representation or warranty in this Amendment shall constitute an Event of Default as provided in Section 12.1 of the Credit Agreement.

8. **Conditions Precedent.** The effectiveness of the amendments contained in Section 2 hereof is subject to the satisfaction of each of the following conditions precedent, in form and substance satisfactory to Administrative Agent, unless satisfaction thereof is specifically waived in writing by Administrative Agent:

(a) Administrative Agent shall have received each of the following:

(i) counterparts of this Amendment, duly executed by each Borrower and each of the Lenders;

(ii) an omnibus officer's certificate certifying authorizing resolutions of each Borrower, substantially in the form attached to this Amendment or in such other form as may be agreed to by Administrative Agent, duly executed by an authorized officer of such Borrower;

(iii) counterparts of a Fee Letter relating to this Amendment (the "Third Amendment Fee Letter"), in form and substance satisfactory to Administrative Agent, duly executed by each Borrower; and

(iv) a Borrowing Base Certificate or other certificate signed by a Senior Officer, stating that, at the time this Amendment becomes effective, Liquidity will equal or exceed $240,000,000; and

(b) No Default or Event of Default shall exist.

9. **Fees and Expenses.** Borrowers jointly and severally agree to pay all out-of-pocket expenses incurred by the Administrative Agent in connection with the preparation, negotiation, execution, delivery and enforcement of this Amendment and the other documents and instruments referred to herein or contemplated hereby, including, but not limited to, the fees and disbursements of Administrative Agent's legal counsel, in each case, to the extent provided in the Credit Agreement.

10. **Governing Law.** THIS AMENDMENT SHALL BE GOVERNED BY THE LAWS OF THE STATE OF NEW YORK, WITHOUT GIVING EFFECT TO ANY CONFLICT OF LAW PRINCIPLES OR OTHER RULE OF LAW WHICH WOULD CAUSE THE APPLICATION OF THE LAW OF ANY JURISDICTION OTHER THAN THE LAW OF THE STATE OF NEW YORK.

11. **No Novation, etc.** Except as otherwise expressly provided in this Amendment, nothing herein shall be deemed to amend or modify any provision of the Credit Agreement or any of the other Loan Documents, each of which shall remain in full force and effect. This Amendment is not intended to be, nor shall it be construed to create, a novation or accord and satisfaction, and the Credit Agreement as herein modified shall continue in full force and effect.

12. **Successors and Assigns.** This Amendment shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns as provided in Section 14.1 of the Credit Agreement.

13. **Entire Agreement.** This Amendment constitutes the entire understanding among the parties hereto with respect to the subject matter hereof and supersedes any prior agreements, written or oral, with respect thereto. **THIS WRITTEN AGREEMENT REPRESENTS THE FINAL AGREEMENT AMONG THE PARTIES AND MAY NOT BE CONTRADICTED BY EVIDENCE OF PRIOR, CONTEMPORANEOUS, OR SUBSEQUENT ORAL AGREEMENTS OF THE PARTIES. THERE ARE NO UNWRITTEN ORAL AGREEMENTS AMONG THE PARTIES.**

14. **Miscellaneous.** This Amendment may be executed in any number of counterparts and by different parties to this Amendment on separate counterparts, each of which, when so executed, shall be deemed an original, but all such counterparts shall constitute one and the same agreement. Any manually executed signature page to this Amendment delivered by a party by facsimile or other electronic transmission shall be deemed to be an original signature hereto. Section titles and references used in this Amendment shall be without substantive meaning or content of any kind whatsoever and are not a part of the agreements among the parties hereto.

15. **Waiver of Jury Trial. To the fullest extent permitted by applicable law, each party hereby waives the right to trial by jury in any action, suit, counterclaim or proceeding arising out of or related to this Amendment**.

16. **Release of Claims. In consideration of Administrative Agent's and Lenders' agreement to amend the Credit Agreement as provided herein, each Borrower hereby RELEASES, ACQUITS AND FOREVER DISCHARGES Administrative Agent, each LC Issuer and each Lender, and each of their respective officers, directors, agents, employees, representatives, Affiliates and trustees and any successors and assigns of any of the foregoing (each, a "Releasee", and collectively, the "Releasees"), from any and all liabilities, claims, demands, actions or causes of action of any kind or nature (if there be any), whether absolute or contingent, disputed or undisputed, at law or in equity, or known or unknown, that any Borrower now has or ever had against any of the Releasees arising under or in connection with the Loan Documents, based in whole or in part on facts, whether or not now known, existing on or before the date of this Amendment (collectively, "Claims"). Each Borrower hereby represents and warrants to the Releasees that no Borrower has transferred or assigned to any person or entity of any kind any Claim that such Borrower ever had or claimed to have against any Releasee.**

[Remainder of page intentionally left blank;
signatures begin on the following page.]

IN WITNESS WHEREOF, the signatories hereto have caused this Amendment to be executed by their respective duly authorized officers as of the day and year first above written.

ARCH RESOURCES, INC.
as “Borrower Agent” and as a “Borrower”

By: /s/ Robert Jones
Name: Robert Jones
Title: Senior Vice President – Law

ACI TERMINAL, LLC
ALLEGHENY LAND LLC
ARCH COAL SALES COMPANY, INC.
ARCH COAL GROUP, LLC
ARCH COAL OPERATIONS LLC
ARCH COAL WEST, LLC
ARCH ENERGY RESOURCES, LLC
ARCH LAND LLC
ARCH OF WYOMING, LLC
ARCH RECLAMATION SERVICES LLC
ARCH WESTERN ACQUISITION CORPORATION
ARCH WESTERN ACQUISITION, LLC
ARCH WESTERN BITUMINOUS GROUP, LLC
ARCH WESTERN RESOURCES, LLC
ARK LAND LLC
ARK LAND KH LLC
ARK LAND LT LLC
ARK LAND WR LLC
ASHLAND TERMINAL, INC.
BRONCO MINING COMPANY LLC
CATENARY COAL HOLDINGS LLC
COALQUEST DEVELOPMENT LLC
HAWTHORNE COAL COMPANY LLC
HUNTER RIDGE COAL LLC
HUNTER RIDGE HOLDINGS, INC.
HUNTER RIDGE LLC
ICG BECKLEY, LLC
ICG EAST KENTUCKY, LLC
ICG EASTERN LAND, LLC
ICG EASTERN, LLC
ICG ILLINOIS, LLC
as “Borrowers”

By: /s/ Robert G. Jones
Name: Robert G, Jones
Title: Secretary

[Signatures continued on following page.]

ICG NATURAL RESOURCES, LLC
ICG TYGART VALLEY, LLC
ICG, LLC
INTERNATIONAL ENERGY GROUP, LLC
JULIANA MINING COMPANY LLC
KING KNOB COAL CO. LLC
MAIDSVILLE LANDING TERMINAL, LLC
MARINE COAL SALES LLC
MEADOW COAL HOLDINGS, LLC
MELROSE COAL COMPANY LLC
MINGO LOGAN COAL LLC
MOUNTAIN COAL COMPANY, L.L.C.
MOUNTAIN GEM LAND LLC
MOUNTAIN MINING LLC
MOUNTAINEER LAND LLC
OTTER CREEK COAL, LLC
PATRIOT MINING COMPANY LLC
PRAIRIE HOLDINGS, INC.
SHELBY RUN MINING COMPANY, LLC
THUNDER BASIN COAL COMPANY, L.L.C.
TRITON COAL COMPANY, LLC
UPSHUR PROPERTY LLC
VINDEX ENERGY LLC
WESTERN ENERGY RESOURCES LLC
WHITE WOLF ENERGY LLC
WOLF RUN MINING LLC
as "Borrowers"

By:_/s/ Robert G. Jones
____
Name: Robert Jones
Title: Secretary

[Signatures continued on following page.]

REGIONS BANK
as “Administrative Agent”, “LC Issuer,” and as the sole “Lender”

By: /s/ Mark A. Kassis
Name: Mark A. Kassis
Title: Managing Director

ANNEX A

Replacement Exhibit E to the Credit Agreement

(See attached.)

EXHIBIT E

FORM OF BORROWING BASE CERTIFICATE

See Attached.

OMNIBUS OFFICER'S CERTIFICATE
OF
AUTHORIZING RESOLUTIONS

September 30, 2020

Each of the undersigned DOES HEREBY CERTIFY that he or she is an officer of **ARCH RESOURCES, INC.**, a Delaware corporation ("Arch"), and/or certain of its direct and indirect subsidiaries listed on the annexes to this certificate (together with Arch, collectively, "Companies", and each individually a "Company"), as indicated beneath his signature hereto, and he or she is keeper of or has direct access to the records of each Company for which he or she is indicated to be an officer;

Each of the undersigned DOES FURTHER CERTIFY, with respect to each Company for which he or she is indicated to be an officer, that the Board of Directors, managers or members, as applicable, of each such Company duly adopted resolutions (or written consents in lieu of resolutions) by unanimous consent, effective as of September 30, 2020, substantially identical to the written consent in lieu of resolutions attached hereto as Exhibit A; and that said resolutions (or written consents in lieu of resolutions) are still in full force and effect.

Each of the undersigned DOES FURTHER CERTIFY, with respect to each Company for which he or she is indicated to be an officer, that attached hereto as Exhibit B is a list of the Authorized Officers of each such Company who are authorized to execute any Loan Document or any other document delivered in connection therewith on behalf of the Company and on this day hold the offices set opposite his or her name, and the signatures appearing opposite their respective names are the true and genuine signatures of such officers.

Each of the undersigned DOES FURTHER CERTIFY, with respect to each Company for which he or she is indicated to be an officer, that the Organizational Documents of each such Company have not been amended or modified since the same were certified to Regions Bank on April 27, 2017 except as shown on Exhibit C attached hereto.

[Remainder of page intentionally left blank;
signatures appear on the following page.]

IN WITNESS WHEREOF, the undersigned have hereunto set their hands on the date first written above.

____
Robert Jones, Senior Vice President – Law of Arch Resources, Inc. and Secretary of each Company listed on Annex A hereto

The undersigned, each being an authorized officer of the Companies indicated beneath his signature below, do hereby certify, with respect to each Company for which he is indicated to be an officer, that the foregoing resolutions (or resolutions substantially identical to the foregoing resolutions) were passed by the Board of Directors, members or managers, as applicable, of each such Company, and that the individual signing above with respect to each such Company is an authorized officer of each such Company and is duly authorized to attest to the passage of said resolutions.

____
Matt Giljum, Senior Vice President and CFO of Arch Resources, Inc.

____
Rosemary Klein, Vice President and Assistant Secretary of each Company listed on Annex A hereto

EXHIBIT A

Form of Resolutions or Written Consents in Lieu of Resolutions

(See attached.)

EXHIBIT B

Names and Titles of Officers; Specimen Signatures

Name and Specimen Signature	Title	Applicable Company(ies)
Paul Lang	CEO and President	Arch Resources, Inc.
By:________________________	President	ACI Terminal, LLC Allegheny Land LLC Arch Coal Group, LLC Arch Coal Operations LLC Arch of Wyoming, LLC Arch Reclamation Services LLC Arch Western Acquisition Corporation Arch Western Acquisition, LLC Arch Western Bituminous Group, LLC Arch Western Resources, LLC Ark Land KH LLC Ark Land LT LLC Ark Land WR LLC Bronco Mining Company LLC Catenary Coal Holdings LLC CoalQuest Development LLC Hawthorne Coal Company LLC Hunter Ridge Coal LLC Hunter Ridge Holdings, Inc. Hunter Ridge LLC ICG Beckley, LLC ICG East Kentucky, LLC ICG Eastern Land, LLC ICG Eastern, LLC ICG Illinois, LLC ICG Natural Resources, LLC ICG Tygart Valley, LLC ICG, LLC International Energy Group, LLC Juliana Mining Company LLC King Knob Coal Co. LLC Marine Coal Sales LLC Meadow Coal Holdings, LLC Melrose Coal Company LLC Mingo Logan Coal LLC Mountain Coal Company, L.L.C. Mountain Gem Land LLC Mountain Mining LLC Mountaineer Land LLC Otter Creek Coal, LLC Patriot Mining Company LLC Prairie Holdings, Inc.

		Shelby Run Mining Company, LLC Thunder Basin Coal Company, L.L.C. Triton Coal Company, LLC Upshur Property LLC Vindex Energy LLC Western Energy Resources LLC White Wolf Energy LLC Wolf Run Mining LLC
Matt Giljum By:________________________	Senior Vice President and CFO	Arch Resources, Inc.
	Vice President	Arch Coal West, LLC Arch Western Acquisition, LLC Arch Western Resources, LLC
John Drexler By:________________________	Senior Vice President and COO	Arch Resources, Inc.
	Vice President and Treasurer	ACI Terminal, LLC Allegheny Land LLC Arch Coal Sales Company, Inc. Arch Coal Group, LLC Arch Coal Operations LLC Arch Coal West, LLC Arch Energy Resources, LLC Arch Land LLC Arch of Wyoming, LLC Arch Reclamation Services LLC Arch Western Acquisition Corporation Arch Western Acquisition, LLC Arch Western Bituminous Group, LLC Arch Western Resources, LLC Ark Land LLC Ark Land KH LLC Ark Land LT LLC Ark Land WR LLC Ashland Terminal, Inc. Bronco Mining Company LLC Catenary Coal Holdings LLC CoalQuest Development LLC Hawthorne Coal Company LLC Hunter Ridge Coal LLC Hunter Ridge Holdings, Inc. Hunter Ridge LLC ICG Beckley, LLC ICG East Kentucky, LLC ICG Eastern Land, LLC ICG Eastern, LLC ICG Illinois, LLC ICG Natural Resources, LLC

		ICG Tygart Valley, LLC ICG, LLC International Energy Group, LLC Juliana Mining Company LLC King Knob Coal Co. LLC Maidsville Landing Terminal, LLC Marine Coal Sales LLC Meadow Coal Holdings, LLC Melrose Coal Company LLC Mingo Logan Coal LLC Mountain Coal Company, L.L.C. Mountain Gem Land LLC Mountain Mining LLC Mountaineer Land LLC Otter Creek Coal, LLC Patriot Mining Company LLC Prairie Holdings, Inc. Shelby Run Mining Company, LLC Thunder Basin Coal Company, L.L.C. Triton Coal Company, LLC Upshur Property LLC Vindex Energy LLC Western Energy Resources LLC White Wolf Energy LLC Wolf Run Mining LLC
Robert Jones By:_______________________	Senior Vice President – Law, General Counsel and Secretary	Arch Resources, Inc.
	Secretary	ACI Terminal, LLC Allegheny Land LLC Arch Coal Sales Company, Inc. Arch Coal Group, LLC Arch Coal Operations LLC Arch Energy Resources, LLC Arch Land LLC Arch of Wyoming, LLC Arch Reclamation Services LLC Arch Western Acquisition Corporation Arch Western Acquisition, LLC Arch Western Bituminous Group, LLC Ark Land LLC Ark Land KH LLC Ark Land LT LLC Ark Land WR LLC Ashland Terminal, Inc.

		Bronco Mining Company LLC Catenary Coal Holdings LLC CoalQuest Development LLC Hawthorne Coal Company LLC Hunter Ridge Coal LLC Hunter Ridge Holdings, Inc. Hunter Ridge LLC ICG Beckley, LLC ICG East Kentucky, LLC ICG Eastern Land, LLC ICG Eastern, LLC ICG Illinois, LLC ICG Natural Resources, LLC ICG Tygart Valley, LLC ICG, LLC International Energy Group, LLC Juliana Mining Company LLC King Knob Coal Co. LLC Maidsville Landing Terminal, LLC Marine Coal Sales LLC Meadow Coal Holdings, LLC Melrose Coal Company LLC Mingo Logan Coal LLC Mountain Coal Company, L.L.C. Mountain Gem Land LLC Mountain Mining LLC Mountaineer Land LLC Otter Creek Coal, LLC Patriot Mining Company LLC Prairie Holdings, Inc. Shelby Run Mining Company, LLC Thunder Basin Coal Company, L.L.C. Triton Coal Company, LLC Upshur Property LLC Vindex Energy LLC Western Energy Resources LLC White Wolf Energy LLC Wolf Run Mining LLC
	Vice President and Secretary	Arch Western Resources, LLC
	President and Secretary	Arch Coal West, LLC
Rosemary Klein By:______________________	Vice President and Assistant Secretary	ACI Terminal, LLC Allegheny Land LLC Arch Coal Sales Company, Inc. Arch Coal Group, LLC Arch Coal Operations LLC Arch Coal West, LLC

		Arch Energy Resources, LLC Arch Land LLC Arch of Wyoming, LLC Arch Reclamation Services LLC Arch Western Acquisition Corporation Arch Western Acquisition, LLC Arch Western Bituminous Group, LLC Arch Western Resources, LLC Ark Land LLC Ark Land KH LLC Ark Land LT LLC Ark Land WR LLC Ashland Terminal, Inc. Bronco Mining Company LLC Catenary Coal Holdings LLC CoalQuest Development LLC Hawthorne Coal Company LLC Hunter Ridge Coal LLC Hunter Ridge Holdings, Inc. Hunter Ridge LLC ICG Beckley, LLC ICG East Kentucky, LLC ICG Eastern Land, LLC ICG Eastern, LLC ICG Illinois, LLC ICG Natural Resources, LLC ICG Tygart Valley, LLC ICG, LLC International Energy Group, LLC Juliana Mining Company LLC King Knob Coal Co. LLC Maidsville Landing Terminal, LLC Marine Coal Sales LLC Meadow Coal Holdings, LLC Melrose Coal Company LLC Mingo Logan Coal LLC Mountain Coal Company, L.L.C. Mountain Gem Land LLC Mountain Mining LLC Mountaineer Land LLC Otter Creek Coal, LLC Patriot Mining Company LLC Prairie Holdings, Inc. Shelby Run Mining Company, LLC Thunder Basin Coal Company, L.L.C.

		Triton Coal Company, LLC Upshur Property LLC Vindex Energy LLC Western Energy Resources LLC White Wolf Energy LLC Wolf Run Mining LLC
Paul Demzik By:________________________	President	Arch Coal Sales Company, Inc. Arch Energy Resources, LLC Ashland Terminal, Inc.
	Vice President	Maidsville Landing Terminal, LLC Marine Coal Sales LLC
David Finnerty By:________________________	President	Arch Land LLC Ark Land LLC
John Ziegler, Jr. By:________________________	Vice President	Arch of Wyoming, LLC ICG Beckley, LLC ICG Illinois, LLC ICG Tygart Valley, LLC ICG, LLC Mingo Logan Coal LLC Mountain Coal Company, L.L.C. Otter Creek Coal, LLC Thunder Basin Coal Company, L.L.C. Vindex Energy LLC Wolf Run Mining LLC

EXHIBIT C

Amendments to Organizational Documents

(See attached.)

ANNEX A

ACI Terminal, LLC
Allegheny Land LLC
Arch Coal Sales Company, Inc.
Arch Coal Group, LLC
Arch Coal Operations LLC
Arch Coal West, LLC
Arch Energy Resources, LLC
Arch Land LLC
Arch of Wyoming, LLC
Arch Reclamation Services LLC
Arch Western Acquisition Corporation
Arch Western Acquisition, LLC
Arch Western Bituminous Group, LLC
Arch Western Resources, LLC
Ark Land LLC
Ark Land KH LLC
Ark Land LT LLC
Ark Land WR LLC
Ashland Terminal, Inc.
Bronco Mining Company LLC
Catenary Coal Holdings LLC
CoalQuest Development LLC
Hawthorne Coal Company LLC
Hunter Ridge Coal LLC
Hunter Ridge Holdings, Inc.
Hunter Ridge LLC
ICG Beckley, LLC
ICG East Kentucky, LLC
ICG Eastern Land, LLC
ICG Eastern, LLC
ICG Illinois, LLC
ICG Natural Resources, LLC
ICG Tygart Valley, LLC
ICG, LLC
International Energy Group, LLC
Juliana Mining Company LLC
King Knob Coal Co. LLC
Maidsville Landing Terminal, LLC
Marine Coal Sales LLC
Meadow Coal Holdings, LLC
Melrose Coal Company LLC
Mingo Logan Coal LLC
Mountain Coal Company, L.L.C.
Mountain Gem Land LLC
Mountain Mining LLC
Mountaineer Land LLC
Otter Creek Coal, LLC
Patriot Mining Company LLC
Prairie Holdings, Inc.

Shelby Run Mining Company, LLC
Thunder Basin Coal Company, L.L.C.
Triton Coal Company, LLC
Upshur Property LLC
Vindex Energy LLC
Western Energy Resources LLC
White Wolf Energy LLC
Wolf Run Mining LLC

FOURTH AMENDMENT TO THIRD AMENDED AND RESTATED
RECEIVABLES PURCHASE AGREEMENT

THIS FOURTH AMENDMENT TO THIRD AMENDED AND RESTATED RECEIVABLES PURCHASE AGREEMENT (this "Amendment"), dated as of September 30, 2020, is entered into among ARCH RECEIVABLE COMPANY, LLC (the "Seller"), ARCH COAL SALES COMPANY, INC. (the "Servicer"), the various financial institutions party to the Agreement (as defined below) as Conduit Purchasers (the "Conduit Purchasers"), as Related Committed Purchasers (the "Related Committed Purchasers"), as LC Participants (the "LC Participants"), and as Purchaser Agents (the "Purchaser Agents"), and PNC BANK, NATIONAL ASSOCIATION ("PNC"), as Administrator (the "Administrator") and as LC Bank (the "LC Bank"; together with the Conduit Purchasers, the Related Committed Purchasers and the LC Participants, the "Purchasers").

RECITALS

1. The parties hereto are parties to the Third Amended and Restated Receivables Purchase Agreement, dated as of October 5, 2016 (as amended, restated, supplemented or otherwise modified through the date hereof, the "Agreement").

2. Concurrently herewith, the Seller, the Servicer, ACI, the Administrator, PNC Capital Markets LLC and PNC are entering into that certain Twelfth Amended and Restated Purchaser Group Fee Letter (the "PNC Fee Letter"), dated as of the date hereof.

3. Concurrently herewith, the Seller, the Servicer, ACI and Regions are entering into that certain Fifth Amended and Restated Purchaser Group Fee Letter (the "Regions Fee Letter"; together with the PNC Fee Letter, collectively, the "Fee Letters"), dated as of the date hereof.

4. The parties hereto desire to amend the Agreement as hereinafter set forth.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

SECTION 1. *Certain Defined Terms*. Capitalized terms that are used but not defined herein shall have the meanings set forth in the Agreement.

SECTION 2. *Amendment to the Agreement.* The Agreement is hereby amended to incorporate the changes shown on the marked pages of the Agreement attached hereto as Exhibit A.

SECTION 3. *Representations and Warranties*. Each of the Seller and the Servicer hereby represents and warrants to the Administrator, the Purchaser Agents and the Purchasers as follows:

(a) Representations and Warranties. The representations and warranties made by such Person in the Agreement and each of the other Transaction Documents are true and correct as of the date hereof (unless stated to relate solely to an earlier date, in which case such representations or warranties were true and correct as of such earlier date).

(b) Enforceability. The execution and delivery by such Person of this Amendment, and the performance of each of its obligations under this Amendment and the Agreement, as amended hereby, are within each of its organizational powers and have been duly authorized by all necessary action on its part. This Amendment and the Agreement, as amended hereby, are such Person's valid and legally binding obligations, enforceable in accordance with their respective terms.

(c) No Default. Both before and immediately after giving effect to this Amendment and the transactions contemplated hereby, no Termination Event or Unmatured Termination Event exists or shall exist.

SECTION 4. *Effect of Amendment; Ratification*. All provisions of the Agreement, as expressly amended and modified by this Amendment, shall remain in full force and effect. After this Amendment becomes effective, all references in the Agreement (or in any other Transaction Document) to "the Receivables Purchase Agreement", "this Agreement", "hereof", "herein" or words of similar effect, in each case referring to the Agreement shall be deemed to be references to the Agreement as amended by this Amendment. This Amendment shall not be deemed, either expressly or impliedly, to waive, amend or supplement any provision of the Agreement other than as specifically set forth herein. The Agreement, as amended by this Amendment, is hereby ratified and confirmed in all respects.

SECTION 5. *Effectiveness*. This Amendment shall become effective as of the date hereof, upon (I) receipt by the Administrator of duly executed counterparts of each of (a) this Amendment, (b) the PNC Fee Letter and (c) the Regions Fee Letter and (II) payment by Seller of all fees payable on the date hereof under (and in accordance with) the Fee Letters.

SECTION 6. *Counterparts*. This Amendment may be executed in any number of counterparts and by different parties on separate counterparts, each of which when so executed shall be deemed to be an original and all of which when taken together shall constitute but one and the same instrument. Delivery of an executed counterpart of a signature page to this Amendment by facsimile or electronic transmission shall be effective as delivery of a manually executed counterpart hereof.

SECTION 7. *Governing Law*. This Amendment shall be governed by, and construed in accordance with, the internal laws of the State of New York (including for such purposes Sections 5-1401 and 5-1402 of the General Obligations Law of the State of New York).

SECTION 8. *Section Headings*. The various headings of this Amendment are included for convenience only and shall not affect the meaning or interpretation of this Amendment, the Agreement or any provision hereof or thereof.

SECTION 9. *Successors and Assigns*. This Amendment shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and permitted assigns.

SECTION 10. *Ratification*. After giving effect to this Amendment and the transactions contemplated by this Amendment, all of the provisions of the Performance Guaranty shall remain in full force and effect and the Performance Guarantor hereby ratifies and affirms the Performance Guaranty and acknowledges that the Performance Guaranty has continued and shall continue in full force and effect in accordance with its terms.

SECTION 11. *Transaction Document*. For the avoidance of doubt, each party hereto agrees that this Amendment constitutes a Transaction Document.

SECTION 12. *Severability*. Each provision of this Amendment shall be severable from every other provision of this Amendment for the purpose of determining the legal enforceability of any provision hereof, and the unenforceability of one or more provisions of this Amendment in one jurisdiction shall not have the effect of rendering such provision or provisions unenforceable in any other jurisdiction.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties have executed this Amendment as of the date first written above.

ARCH RECEIVABLE COMPANY, LLC,
as Seller

By:/s/ John T. Drexler
Name: John T. Drexler
Title: President

ARCH COAL SALES COMPANY, INC.,
as Servicer

By:/s/ John T. Drexler
Name: John T. Drexler
Title: Vice President and Treasurer

ARCH RESOURCES, INC.,
as Performance Guarantor

By:/s/ John T. Drexler
Name: John T. Drexler
Title: Senior Vice President and Chief Operating Officer

PNC BANK, NATIONAL ASSOCIATION,
as Administrator

By: /s/ Michael Brown
Name: Michael Brown
Title: Senior Vice President

PNC BANK, NATIONAL ASSOCIATION,
as a Purchaser Agent

By: /s/ Michael Brown
Name: Michael Brown
Title: Senior Vice President

PNC BANK, NATIONAL ASSOCIATION,
as the LC Bank and as an LC Participant

By: /s/ Michael Brown
Name: Michael Brown
Title: Senior Vice President

PNC BANK, NATIONAL ASSOCIATION,
as a Related Committed Purchaser

By: /s/ Michael Brown
Name: Michael Brown
Title: Senior Vice President

REGIONS BANK,
as a Purchaser Agent

By: /s/ Mark A. Kassis
Name: Mark A. Kassis
Title: Managing Director

REGIONS BANK,
as a Related Committed Purchaser

By: /s/ Mark A. Kassis
Name: Mark A. Kassis
Title: Managing Director

REGIONS BANK,
as an LC Participant

By: /s/ Mark A. Kassis
Name: Mark A. Kassis
Title: Managing Director

[EXHIBIT A]

738194802 15494375

EXHIBIT 31.1

Certification

I, Paul A. Lang, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Arch Resources, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(e) 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

(f) 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.

/s/ Paul A. Lang

Paul A. Lang
Chief Executive Officer, Director
Date: October 23, 2020

Certification

I, Matthew C. Giljum, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Arch Resources, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Matthew C. Giljum

Matthew C. Giljum
Senior Vice President and Chief Financial Officer
Date: October 23, 2020

EXHIBIT 32.1

Certification of Periodic Financial Reports

I, Paul A. Lang, Chief Executive Officer, Director of Arch Resources, Inc., certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2020 (the “Periodic Report”) which this statement accompanies fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

(2) information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of Arch Resources, Inc.

/s/ Paul A. Lang
Paul A. Lang
Chief Executive Officer, Director
Date: October 23, 2020

EXHIBIT 32.2

Certification of Periodic Financial Reports

I, Matthew C. Giljum, Senior Vice President and Chief Financial Officer of Arch Resources, Inc., certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2020 (the “Periodic Report”) which this statement accompanies fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

(2) information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of Arch Resources, Inc.

/s/ Matthew C. Giljum
Matthew C. Giljum
Senior Vice President and Chief Financial Officer
Date: October 23, 2020

Mine Safety and Health Administration Safety Data

We believe that Arch Resources, Inc. ("Arch Resources") is one of the safest coal mining companies in the world. Safety is a core value at Arch Resources and at our subsidiary operations. We have in place a comprehensive safety program that includes extensive health & safety training for all employees, site inspections, emergency response preparedness, crisis communications training, incident investigation, regulatory compliance training and process auditing, as well as an open dialogue between all levels of employees. The goals of our processes are to eliminate exposure to hazards in the workplace, ensure that we comply with all mine safety regulations, and support regulatory and industry efforts to improve the health and safety of our employees along with the industry as a whole.

The operation of our mines is subject to regulation by the Federal Mine Safety and Health Administration (MSHA) under the Federal Mine Safety and Health Act of 1977 (Mine Act). MSHA inspects our mines on a regular basis and issues various citations, orders and violations when it believes a violation has occurred under the Mine Act. We present information below regarding certain mining safety and health violations, orders and citations, issued by MSHA and related assessments and legal actions and mine-related fatalities with respect to our coal mining operations. In evaluating the above information regarding mine safety and health, investors should take into account factors such as: (i) the number of citations and orders will vary depending on the size of a coal mine, (ii) the number of citations issued will vary from inspector to inspector and mine to mine, and (iii) citations and orders can be contested and appealed, and in that process are often reduced in severity and amount, and are sometimes dismissed or vacated.

The table below sets forth for the three months ended September 30, 2020 for each active MSHA identification number of Arch Resources and its subsidiaries, the total number of: (i) violations of mandatory health or safety standards that could significantly and substantially contribute to the cause and effect of a coal or other mine safety or health hazard under section 104 of the Mine Act for which the operator received a citation from MSHA; (ii) orders issued under section 104(b) of the Mine Act; (iii) citations and orders for unwarrantable failure of the mine operator to comply with mandatory health or safety standards under section 104(d) of the Mine Act; (iv) flagrant violations under section 110(b)(2) of the Mine Act; (v) imminent danger orders issued under section 107(a) of the Mine Act; (vi) proposed assessments from MHSA (regardless of whether Arch Coal has challenged or appealed the assessment); (vii) mining-related fatalities; (viii) notices from MSHA of a pattern of violations of mandatory health or safety standards that are of such nature as could have significantly and substantially contributed to the cause and effect of coal or other mine health or safety hazards under section 104(e) of the Mine Act; (ix) notices from MSHA regarding the potential to have a pattern of violations as referenced in (viii) above; and (x) pending legal actions before the Federal Mine Safety and Health Review Commission (as of September 30, 2020) involving such coal or other mine, as well as the aggregate number of legal actions instituted and the aggregate number of legal actions resolved during the reporting period.

Mine or Operating Name / MSHA Identification Number	Section 104 S&S Citations (#)	Section 104(b) Orders (#)	Section 104(d) Citations and Orders (#)	Section 110(b)(2) Violations (#)	Section 107(a) Orders (#)	Total Dollar Value of MSHA Assessments Proposed (in thousands) ($)	Total Number of Mining Related Fatalities (#)	Received Notice of Pattern of Violations Under Section 104(e) (Yes/No)	Received Notice of Potential to Have Pattern of Violations Under Section 104(e) (Yes/No)	Legal Actions Initiated During Period (#)	Legal Actions Resolved During Period (#)	Legal Actions Pending as of Last Day of Period(1) (#)
Active Operations												
Vindex Cabin Run / 18-00133	—	—	—	—	—	—	—	No	No	—	—	—
Vindex Bismarck / 46-09369	—	—	—	—	—	—	—	No	No	—	—	—
Vindex Jackson Mt. / 18-00170	—	—	—	—	—	—	—	No	No	—	—	—
Vindex Wolf Den Run / 18-00790	—	—	—	—	—	—	—	No	No	—	—	—
Vindex Energy / Vindex / 46-02151	—	—	—	—	—	—	—	No	No	—	—	—
Vidnex Energy / Carlos Surface / 18-00769	—	—	—	—	—	—	—	No	No	—	—	—
Vindex Energy / Douglas Island / 18-00749	—	—	—	—	—	—	—	No	No	—	—	—
Vindex Energy / Dobbin Ridge Prep Plant / 46-07837	—	—	—	—	—	—	—	No	No	—	—	—
Vindex Energy / Frostburg Blend Yard / 18-00709	—	—	—	—	—	—	—	No	No	—	—	—
Beckley Pocahontas Mine / 46-05252	11	1	—	—	—	55.9	—	No	No	3	3	3
Beckley Pocahontas Plant / 46-09216	—	1	—	—	—	—	—	No	No	—	—	—
Coal Mac Holden #22 Prep Plant / 46-05909	—	—	—	—	—	—	—	No	No	—	—	—
Coal Mac Ragland Loadout / 46-08563	—	—	—	—	—	—	—	No	No	—	—	—
Coal Mac Holden #22 Surface / 46-08984	—	—	—	—	—	—	—	No	No	—	—	—
Eastern Birch River Mine / 46-07945	—	—	—	—	—	—	—	No	No	—	—	—
Sentinel Mine / 46-04168	35	—	—	—	—	72.9	—	No	No	2	1	2
Sentinel Prep Plant / 46-08777	—	—	—	—	—	—	—	No	No	—	—	—

Mingo Logan Mountaineer II / 46-09029	29	1	—	—	—	18.6	—	No	No	2	3	2
Mingo Logan Cardinal Prep Plant / 46-09046	2	—	—	—	—	1.9	—	No	No	—	—	—
Mingo Logan Daniel Hollow / 46-09047	—	—	—	—	—	—	—	No	No	—	—	—
Leer #1 Mine / 46-09192	5	—	—	—	—	9.8	—	No	No	3	3	—
Arch of Wyoming Elk Mountain / 48-01694	—	—	—	—	—	—	—	No	No	—	—	—
Black Thunder / 48-00977	—	—	—	—	—	—	—	No	No	—	—	—
Coal Creek / 48-01215	—	—	—	—	—	—	—	No	No	—	—	—
West Elk Mine / 05-03672	4	—	—	—	—	30.0	—	No	No	—	—	1
Viper Mine / 11-02664	6	—	—	—	—	6.6	—	No	No	—	—	—
Leer #1 Prep Plant / 46-09191	—	—	—	—	—	—	—	No	No	—	—	—
Wolf Run Mining – Sawmill Run Prep Plant / 46-05544	—	—	—	—	—	—	—	No	No	—	—	—
Wolf Run Mining / Imperial / 46-09115	—	—	—	—	—	—	—	No	No	—	—	—
Wolf Run Mining / Upshur / 46-05823	—	—	—	—	—	—	—	No	No	—	—	—

(1) See table below for additional details regarding Legal Actions Pending as of September 30, 2020.

Mine or Operating Name/MSHA Identification Number	**Contests of Citations, Orders (as of September 30, 2020)**	**Contests of Proposed Penalties (as of September 30, 2020)**	**Complaints for Compensation (as of September 30, 2020)**	**Complaints of Discharge, Discrimination or Interference (as of September 30, 2020)**	**Applications for Temporary Relief (as of September 30, 2020)**	**Appeals of Judges' Decisions or Orders (as of September 30, 2020)**
Beckley Pocahontas Mine / 46-05252	—	3	—	—	—	—
Mingo Logan Mountaineer II / 46-09029	—	2	—	—	—	—
Mountain Coal / West Elk / 05-03672	—	1	—	—	—	—