



April 7, 2015

Ms. Tia L. Jenkins
Senior Assistant Chief Accountant
Office of Beverages, Apparel, and Mining
Division of Corporation Finance
Securities and Exchange Commission
100 F Street, N.E.
Washington, DC 20549

Re: Arch Coal, Inc.
Form 10-K for Fiscal Year Ended December 31, 2014
Filed February 27, 2015
Definitive Proxy Statement on Schedule 14A
Filed March 20, 2015
File No. 001-13105

Dear Ms. Jenkins:

We are providing this letter in response to the comments of the staff of the Securities and Exchange Commission (the "Staff") contained in your letter dated March 31, 2015 regarding the Annual Report on Form 10-K filed by Arch Coal, Inc. ("Arch Coal") for Arch Coal's fiscal year ended December 31, 2014 (the "Form 10-K") and the Definitive Proxy Statement on Schedule 14A filed by Arch Coal on March 20, 2015 (the "Proxy Statement"). Set forth below are the Staff's comments and our responses.

Form 10-K for Fiscal Year Ended December 31, 2014
Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical Accounting Policies, page 76
Income Taxes, page 78

COMMENT NO. 1:

Given your recurring losses before income taxes, please disclose in future filings the nature of the deferred tax assets that have not been offset by a valuation allowance and how you determined they would be realized. Please also disclose the following:

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- The nature of the positive and negative evidence you considered, how that evidence was weighted, and how that evidence led you to determine it was not appropriate to record a valuation allowance on the remaining deferred tax assets;
 - The amount of any pre-tax income you need to generate to realize the deferred tax assets;
 - The anticipated future trends included in any projections of future taxable income; and
 - State, if true, that the deferred tax liabilities you are relying on in your assessment of the realizability of your deferred tax assets will reverse in the same period and jurisdiction and are of the same character as the temporary differences giving rise to the deferred tax assets.

Please provide us your proposed disclosures.

RESPONSE:

We acknowledge the Staff's comment. In future filings we will, to the extent applicable, disclose the information requested in this comment.

Please note that ASC 740-10-30-18 identifies four sources of taxable income that may be available to realize a taxable benefit for deductible temporary differences and carryforwards. For the period covered in the Form 10-K, we considered all sources in determining our valuation allowance but, given our cumulative loss position, concluded the only source available to us was the future reversal of taxable temporary differences. As we based the valuation allowance solely on the expected reversal pattern of our temporary differences, we did not consider future projected pre-tax book income as a source of income. In addition, only deferred tax liabilities of the same character and jurisdiction were relied on to offset our deferred tax assets.

Draft disclosure for future filings that expands our discussion to how we determine our deferred tax assets will be realized and which we believe is responsive to your questions, based on the Form 10-K, follows (changes from the Form 10-K noted in **bold**):

Income Taxes

We provide for deferred income taxes for temporary differences arising from the difference between the financial statement and tax basis of assets and liabilities existing at each balance sheet date using enacted tax rates expected to be in effect when the related taxes are expected to be paid or recovered. We initially recognize the effects of a tax position when it is more than 50 percent likely, based on the technical merits, that the position will be sustained upon

examination, including the resolution of the related appeals or litigation processes, if any. Our determination of whether or not a tax position has met the recognition threshold considers the facts, circumstances, and information available at the reporting date.

We reassess our ability to realize our deferred tax assets annually in the fourth quarter, during our annual budget process, or when circumstances indicate that the ability to realize deferred tax assets has changed. The assessment takes into account expectations of future taxable income or loss, available tax planning strategies and the reversal of temporary differences. The development of these expectations involves the use of estimates such as production levels, operating profitability, timing of development activities and the cost and timing of reclamation work. A valuation allowance may be recorded to reflect the amount of future tax benefits that management believes are not likely to be realized. If actual outcomes differ from our expectations, we may record additional valuation allowance through income tax expense in the period such determination is made.

As our recent cumulative losses constitute significant negative evidence with regards to future taxable income, we have relied solely on the expected reversal of taxable temporary differences to support the future realization of our deferred tax assets. We perform a detailed scheduling process of our net taxable temporary differences. At this time, all deductible temporary differences are expected to be realized as there are sufficient deferred tax liabilities within the same jurisdiction and of the same character that are available to offset them. Valuation allowances have been established for federal and state net operating losses and tax credits that are not offset by the reversal of other net taxable temporary differences before the expiration of the attribute.

Consolidated Financial Statements, page F-1

Consolidated Statements of Cash Flows, page F-8

COMMENT NO. 2:

Please tell us (a) the nature of the amounts included in the minimum royalty payments line item and (b) how you determined they represented cash outflows from investing activities pursuant to ASC 230-10-45-13.

RESPONSE:

In the coal mining industry, lease rights to coal reserves are often acquired through advance royalty payments. These payments are made to lessors under terms of long term mineral lease agreement (generally between five and twenty years) that are recoupable against

future production royalties and charged to cost of sales. These amounts are capitalized as prepaid assets, with amounts expected to be recouped within one year classified as current.

In accordance with ASC 230-10-20, investing activities include making and collecting loans and acquiring and disposing of debt or equity instruments and property, plant and equipment and other productive assets, that is, assets held for or used in the production of goods or services by the entity (other than materials that are part of the entity's inventory).

Additionally, ASC 230-10-45-13 purports that investing activities include payments at the time of purchase or soon before or after purchase to acquire property, plant and equipment and other productive assets, including interest capitalized as part of the cost of those assets. Generally, only advance payments, the down payment, or other amounts paid at the time of purchase or soon before or after the purchase of property, plant and equipment and other productive assets are investing cash flows.

Advance royalty payments represent an acquisition of future mining rights under a mineral lease agreement. These payments generally occur prior to mining on the tract, and will be recouped on a unit of production basis when mining occurs. These types of activities represent an investing activity, whereas the actual mining and selling of the coal to customers would represent an operating activity.

The cash flow classification of advance royalty payments as investing activities is both a historical and consistent industry practice.

Note 26. Segment Information, page F-50

COMMENT NO. 3:

In the second paragraph of this footnote, you indicate impairment charges and mine closure costs are included in the corporate, other and eliminations column. However, it appears some or all of these amounts are included in the reconciliation from Adjusted EBITDA to loss from continuing operations before income taxes. Please revise your disclosures in future filings, as appropriate. Please also revise your management's discussion and analysis in future filings to disclose with quantification the underlying business reasons for changes between periods in the corporate, other and eliminations column. Please provide us your proposed disclosures.

RESPONSE:

We acknowledge the Staff's comment. In future filings, as appropriate, we will provide disclosure that incorporates the comment provided by the Staff.

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

Corporate, Other and Eliminations- Adjusted EBITDA increased in 2014 when compared to 2013 due to reduced expenses recorded in the Statement of Operations line items "Selling, general and administrative expenses" and "Change in fair value of coal derivatives and coal trading activities, net" along with reduced land holding costs and settlement expense in the current year as compared to the prior year.

26. Segment Information

The Company's reportable business segments are based on the major coal producing basins in which the Company operates and ~~may each segment can~~ include a number of mine complexes. The Company manages its coal sales **and allocates capital resources** by coal basin, not by individual mining complex. Geology, coal transportation routes to customers, regulatory environments and coal quality or type are characteristic to a basin, and, accordingly, market and contract pricing have developed by coal basin. Mining operations are evaluated based on their per-ton operating costs (defined as including all mining costs but excluding pass-through transportation expenses), as well as on other non-financial measures, such as safety and environmental performance. The Company's reportable segments are the Powder River Basin (PRB) segment, with operations in Wyoming; and the Appalachia (APP) segment, with operations in West Virginia, Kentucky, Maryland and Virginia. "All Other" includes the Company's coal mining operations in Colorado and Illinois and our ADDCAR subsidiary, **which was sold in the first quarter of 2014. The Corporate, Other and Eliminations grouping includes the 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 2014, the Company changed its measure of segment profit and loss to assess operating segment's performance and to allocate resources from "income from operations" to "adjusted earnings before interest, taxes, depreciation, depletion and amortization (Adjusted EBITDA)." The Company's ~~management~~ **chief operating decision maker uses Adjusted EBITDA as the primary measure of segment profit and loss** and believes that Adjusted EBITDA presents a useful measure of our ability to service existing debt and incur additional debt based on ongoing operations. Adjusted EBITDA does not reflect mine closure or impairment costs **or items that may not reflect the trend of future results**, since those are not reflected in the operating income reviewed by management. See Note 5. "Impairment Charges and Mine Closure Costs"

5

for discussion of these costs. ~~The Corporate, Other and Eliminations grouping includes these charges, as well as the 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.~~

Definitive Proxy Statement on Schedule 14A Filed March 20, 2015
Executive Compensation, page 40

COMMENT NO. 4:

We note your disclosure under Overview on page 41 that the type and amount of compensation for each NEO is determined after considering a variety of factors. We also note the significant increase in your CEO's total compensation. In future filings, please revise your CD&A to separately discuss in greater detail your CEO's compensation, as certain amounts listed in your Summary Compensation Table appear to be based on policies or decisions that are materially different from the policies or decisions for your other executive officers. For example, it is unclear how the amount of stock awards was determined for your CEO. For guidance, please refer to the last paragraph of Section II.B in the Commission's Release No. 37-8732A.

RESPONSE:

We acknowledge the Staff's comment. In future filings we will provide a more detailed discussion of our CEO's compensation.

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Arch Coal acknowledges that:

- Arch Coal is responsible for the adequacy and accuracy of the disclosure in the filing;
- Staff comments or changes to disclosure in response to Staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- Arch Coal may not assert Staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Thank you for your consideration. If you require any additional information on these issues, or if I can provide you with any other information that will facilitate your continued review of the Form 10-K and Proxy Statement, please contact me at 314-994-2700 at your earliest convenience.

6

Sincerely,

ARCH COAL, INC.

By: /s/ John T. Drexler
John T. Drexler
Senior Vice President and
Chief Financial Officer
