

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

April 13, 2015

Via E-Mail
John T. Drexler
Chief Financial Officer
Arch Coal, Inc.
One City Place Drive, Suite 300
St. Louis, MO 63141

Re: Arch Coal, Inc.

Form 10-K for the Year Ended December 31, 2014

Filed February 27, 2015

Definitive Proxy Statement on Schedule 14A

Filed March 20, 2015

Response Dated April 7, 2015

File No. 001-13105

Dear Mr. Drexler:

We have reviewed your April 7, 2015 response to our comment letter and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our March 31, 2015 letter.

Form 10-K for the Year Ended December 31, 2014
Financial Statements and Supplementary Data, page F-1
Notes to Consolidated Financial Statements, page F-10
Note 26. Segment Information, page F-50

1. We note your proposed disclosure for 'corporate, other and eliminations" in Management's Discussion and Analysis in response to comment 3. Please further revise to quantify the material components of corporate, other and eliminations for each period presented and discuss the underlying factors for material changes between periods. Please provide us your proposed disclosures.

John T. Drexler Arch Coal, Inc. April 13, 2015 Page 2

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

2. We note your response to comment 4. Please show us how you propose to revise the discussion of your CEO's compensation based on fiscal year 2014 executive compensation.

You may contact Steve Lo at (202) 551-3394 or Rufus Decker, Accounting Branch Chief, at (202) 551-3769 if you have questions regarding comments on the financial statements and related matters. Please contact Hillary Daniels at (202) 551-3959 or Brigitte Lippmann at (202) 551-3713 with any other questions.

Sincerely,

/s/Tia L. Jenkins

Tia L. Jenkins Senior Assistant Chief Accountant Office of Beverages, Apparel, and Mining