



DIVISION OF
CORPORATION FINANCE

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

May 2, 2012

Via E-mail

Mr. Steven F. Leer, Chairman and Chief Executive Officer
Arch Coal, Inc.
One CityPlace Drive, Suite 300
St. Louis, Missouri 63141

**Re: Arch Coal, Inc.
Form 10-K for Fiscal Year Ended
December 31, 2011
Filed February 29, 2012
Proxy Statement
Filed March 16, 2012
File No. 001-13105**

Dear Mr. Leer:

We have reviewed your filing and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to this comment, we may have additional comments.

Form DEF 14A, filed March 16, 2012

1. We note your statement in the Form 10-K, on page 85, that the Item 201(d) of Regulation S-K disclosure is included under the caption "Equity Compensation Plan Information" in your 2011 Proxy Statement but we are unable to locate such a heading in the proxy, and, as a result, the required disclosure. Please confirm in future filings that you will include the disclosure required by Item 201(d) of Regulation S-K or advise us as applicable.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

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You may contact Blaise Rhodes at (202) 551-3774 or Angela Halac at (202) 551-3398 if you have questions regarding comments on the financial statements and related matters. Please contact Erin Wilson at (202) 551-6047 or David Link at (202) 551-3356 with any other questions.

Sincerely,

/s/ David Link

John Reynolds
Assistant Director