

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-7010

June 17, 2008

Mr. Gregory H. Boyce Chairman and Chief Executive Officer Peabody Energy Corporation 701 Market Street St. Louis, MO 63101

Re: Peabody Energy Corporation

Form 10-K for the Fiscal Year Ended December 31, 2007

Filed February 28, 2008

Form 10-Q for the Quarterly Period Ended March 31, 2008

Filed May 9, 2008

Response letter dated May 14, 2008

File No. 1-16463

Dear Mr. Boyce:

We have reviewed your response letter and filings and have the following comments. Please provide a written response to our comments. Please be as detailed as necessary in your explanations. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2007

General

1. We note your response to our previous comment number five. Please confirm that you will include such explanatory disclosure in your future filings.

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Notes to Consolidated Financial Statements

Note 1 Summary of Significant Accounting Policies

Property, Plant, Equipment and Mine Development Cost, page F-9

2. We have considered your response to prior comment number four wherein you indicate the straight-line method you apply to certain of your mine development assets "is most appropriate given the life assigned to respective assets is reviewed and updated as necessary based on our annual life of mine determinations consistent with other estimation requirements (e.g. asset retirement determinations) related to an operation." Based on your response, please confirm, if true, that the straight-line methodology you use for 80% of your mine development assets allocates the cost of those assets in a systematic and rational manner to the periods during which the related assets are expected to provide benefit, or otherwise advise. Refer to paragraph 86(c) of FASB Statement of Concepts 5.

Form 10-Q for the Quarterly Period Ended March 31, 2008

Controls and Procedures, page 36

3. You disclose that your "disclosure controls and procedures are designed to, among other things, provide reasonable assurance." Please confirm, if true, that your relevant officers have concluded that your disclosure controls and procedures are effective at the reasonable assurance level or otherwise advise and so state. Additionally, please modify your conclusion as to effectiveness of your disclosure controls and procedures to ensure that the reader understands their effectiveness is based upon the reasonable assurance level.

Closing Comments

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

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You may contact Mark Wojciechowski at (202) 551-3759, or in his absence, Jennifer O'Brien at (202) 551-3721 if you have questions regarding comments on the financial statements and related matters. Please contact John Madison at (202) 551-3296 or in his absence, Anne Nguyen Parker at (202) 551-3611 with any other questions.

Sincerely,

H. Roger Schwall Assistant Director