

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

August 22, 2008

Via U.S. mail and facsimile

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

Re: Arch Coal, Inc.

Form 10-K

Filed February 29, 2008

File No. 1-13105

Dear Mr. Leer:

We have completed our review of your filing and response letter and have no further comments at this time.

Sincerely,

H. Roger Schwall Assistant Director

Cc: J. Madison M. Karney