

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-4628

June 16, 2010

Via U.S. Mail

Mr. John T. Drexler Senior Vice President and Chief Financial Officer Arch Coal, Inc. One City Place Drive, Suite 300 St. Louis, Missouri 63141

> Re: Arch Coal, Inc. Form 10-K for the Fiscal Year Ended December 31, 2009 Filed March 1, 2010 File Number 1-13105

Dear Mr. Drexler:

We have completed our review of your Form 10-K and related filings and have no further comments at this time.

Sincerely,

H. Roger Schwall Assistant Director