



DIVISION OF
CORPORATION FINANCE

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

October 5, 2011

Via E-mail

Mr. Domenic J. Dell'Oso, Jr.
Chief Financial Officer
Chesapeake Energy Corporation
6100 North Western Avenue
Oklahoma City, Oklahoma 73118

**Re: Chesapeake Energy Corporation
Form 10-K for Fiscal Year Ended December 31, 2010
Filed March 1, 2011
File No. 1-13726**

Dear Mr. Dell'Oso:

We have reviewed your response letter dated August 22, 2011, and we 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 this letter within ten business days by amending your filings, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply 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 filings and the information you provide in response to these comments, we may have additional comments.

Form 10-K for Fiscal Year Ended December 31, 2010

Business, page 1

Natural Gas and Oil Reserves, page 10

1. Your August 22, 2011 response to our prior comment seven presents 7 normalized producing rate vs. time field plots in support of a five percent terminal production decline rate. Per our October 4, 2011 teleconference, please:

- Tell us the field names and locations;
 - Tell us the criteria for the wells you included and the portion of total available wells included in the plots. Address the reasons that you have not included non-producing field wells with productive lives over 10 years;
 - Explain the remedies you have employed in horizontal wells to address liquid loading and fracture healing; and
 - Tell us the extent of your refracturing treatments, if any.
2. Your response to our prior comment seven also presents your projected time from first production to terminal production decline rate for the Barnett, Fayetteville and Haynesville shales. Please tell us the “b-factors” you used in determining these projected times and confirm, if true, that you used these decline parameter values in the estimation of your disclosed proved reserves in these respective shale reservoirs.

Risk Factors, page 23

3. We note your response to our prior comment two, as well as your risk factor discussion at page 27 under “Natural gas and oil drilling and producing operations...” and under “Potential legislative and regulatory actions could increase our costs...” Specifically, we note that your risk factors do not disclose any specific risks associated with hydraulic fracturing, such as the underground migration and the surface spillage or mishandling of fracturing fluids, including chemical additives. In light of the information you have provided in response to our prior comment two regarding your procedures and historical experience with your hydraulic fracturing operations, please advise whether you believe your current risk factor disclosure addresses all your material risks or whether there are additional material operational and financial risks stemming from your operations that require disclosure in your Risk Factors section.

Exhibit 99.1

4. Please provide a third party report that discusses the considerations of and sources for the estimated future capital costs used.

Exhibit 99.3

5. Please provide a third party report that presents the purpose for which the report was prepared.

Mr. Domenic J. Dell'Osso, Jr.
Chesapeake Energy Corporation
October 5, 2011
Page 3

Closing Comments

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.

You may contact Ronald Winfrey, Petroleum Engineer, at (202) 551-3704 if you have questions regarding the engineering comments. Please contact Sirimal R. Mukerjee, Staff Attorney, at (202) 551-3340 or Alexandra M. Ledbetter, Staff Attorney, at (202) 551-3317 with any other questions.

Sincerely,

/s/H. Roger Schwall

H. Roger Schwall
Assistant Director