

## **POWERTECH (USA) INC.**

**RICHARD E. BLUBAUGH**  
Vice President – Health, Safety  
& Environmental Resources

March 5, 2013

U.S. Nuclear Regulatory Commission  
Two White Flint North  
11545 Rockville Pike  
Rockville, MD 20852-2738  
Attention: Haimanot Yilma, Project Manager

**Re: Dewey-Burdock Project, Air Quality Modeling Protocol and Report**

Dear Ms. Yilma:

This letter transmits the completed report, “Ambient Air Quality Modeling Protocol and Impact Analysis,” for the Dewey-Burdock Project. The report has been prepared by IML Air Science, a division of Inter-Mountain Laboratories, Inc., Sheridan, Wyoming. As a consequence of EPA’s review and comment on the preliminary version of the DSEIS, NRC requested that Powertech perform emissions modeling and visibility modeling due to the proximity of Wind Cave National Park. The enclosed report presents the final results of that modeling effort.

In addition to transmitting the report, this letter includes three related points of information:

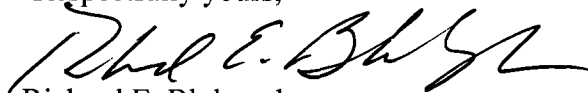
- With two exceptions, all pollutant concentrations were reported as the highest value predicted for the respective averaging intervals (e.g., 1-hr, 24-hr, annual, etc.) at any receptor over the 3-year modeling period. The two exceptions were the SO<sub>2</sub> 1-hr impacts and NO<sub>2</sub> 1-hr impacts. For NO<sub>2</sub>, the model result is reported in the form of the 3-year average of the 98<sup>th</sup> percentile of daily maximum 1-hr distributions for each year, which ends up being the average of the 8<sup>th</sup>-high values from the 3 years. For SO<sub>2</sub>, the model result is reported in the form of the 3-year average of the 98<sup>th</sup> percentile of daily maximum 1-hour distributions for each year, which ends up being the average of the 4<sup>th</sup>-high values from the 3 years. Both of these correspond to the technical definition of the recently established 1-hr standards.
- As described in Powertech’s comments on the DSEIS (ML13022A386, p. 17-18), Powertech has updated traffic estimates based on the implementation of a carpooling policy, which will potentially include providing buses from Edgemont during construction and operations. Following are the revised passenger vehicle estimates during various project phases.

Phase	Estimated Daily Passenger Vehicles (round trips)
Construction — Facilities	22
Construction — Wellfields	16
Operations	27
Aquifer Restoration	5
Decommissioning	7

- Powertech asked for and received an updated traffic count for Dewey Road (County Road 6463) from the Fall River County Highway Department. Two 24-hr road counts were conducted on the Dewey Road (December 19-21, 2012). The results of 189 and 261 vehicles per day are shown in Attachment A to Powertech's comments on the DSEIS (ML13022A386). This updated traffic count does not alter the results; it simply indicates that Powertech's proposed contribution to traffic is a much smaller portion than initially thought.

This report addresses all the potential air quality impacts requested by NRC. It is the product of many months of effort and review between Powertech, IML, NRC and EPA. Please review at your earliest opportunity and use as necessary in preparing the FSEIS.

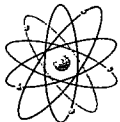
Respectfully yours,



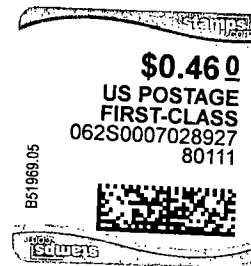
Richard E. Blubaugh

Enclosures

cc: Ron Burrows (w/o encl.)  
Ken Distler, EPA  
Marian Atkins, BLM  
Mike Cepak, DENR  
John Mays, Powertech



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