



February 26, 2016

*Sent via electronic mail*

Mr. Dusty Weber  
Signal Peak Energy, LLC  
Bull Mountain Coal Mine #1, C1993017  
100 Portal Drive  
Roundup, MT 59072

Permit ID: C1993017  
Revision Type: Amendment  
Permitting Action: Deficiency  
Subject: AM3, Sixth Round Acceptability Deficiency

Dear Dusty:

The Department of Environmental Quality (DEQ) has completed its acceptability review regarding Signal Peak Energy, LLC's application for Amendment AM3. The following deficiencies must be adequately addressed before DEQ can determine the application acceptable:

**ARM 17.24.314(3)**: In Appendix 314-5, Attachment I, Table I-1, the values for sodium from both gob water samples are above the maximum baseline values; however, the final column states the gob values are within the baseline range. Please correct this error.

In its recent response (February 11, 2016), SPE states that the correction was made; however, DEQ could not locate a corrected table.

**ARM 17.24.314(3)**: In Appendix 314-5, please include the median values for the Mammoth coal and overburden baseline, Table I-1, Attachment I.

In its recent response (February 11, 2016), SPE states that the correction was made; however, DEQ could not locate a corrected table.

**ARM 17.24.314(3)**: In several places in the PHC, it is stated that the deep underburden is suitable in quality and quantity to supply any future mitigation needs. Five of six samples collected recently from deep underburden wells (BMP 128, BMP129) showed exceedances of the arsenic human health standard. Presumably, high arsenic values may render these waters unsuitable (without treatment) for public and private water supply. SPE must clarify these statements further and/or address how high arsenic levels would be addressed in the mitigation for public and private water supplies.

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In its recent response (February 11, 2016), SPE states that additional language was added; however, DEQ could not locate in the PHC where arsenic mitigation is discussed, specifically regarding the supply and maintenance of on-site treatment systems for public and private water supplies.

**ARM 17.24.314(3)**: Section 3.4.2 of the PHC (pp 314-5-16, 314-5-17) describes subsidence effects associated with longwall mining from a theoretical standpoint. Longwall mining in the Bull Mountains has progressed since year 2010. Please describe the actual observed effects of longwall mining in the Bull Mountains. For example, surface cracking has occurred throughout the mine area, as is evidenced on aerial photographs and through field visits. This appears to be contrary to the statement that “The deformation zone does not fracture upon subsidence.”

In its recent response (Feb 11, 2016), SPE states that “additional detail was added to the section to describe observed effects of longwall mining in the Bull Mountains”; however, DEQ could not locate areas of the PHC that discuss surface cracking, fracturing, or other surface expressions of longwall mining. Please discuss the surface effects observed, their impacts, and SPE’s mitigation efforts to date.

**ARM 17.24.314(3)**: In Section 3.5 of the PHC, please do not ascertain the class of groundwater using ‘average’ conditions. The majority of these references to average class were corrected in the latest response (February 11, 2016); however, one remains in Section 3.5.5. Please eliminate this last reference to average beneficial use classes.

Upon receipt of satisfactory responses to these deficiencies, DEQ will determine the application to be acceptable.

Please feel free to contact Robert D. Smith at 406-444-7444 with questions regarding this letter.

Sincerely,



Chris Yde, Supervisor  
Coal and Uranium Program  
Industrial and Energy Minerals Bureau  
Phone: 406-444-4967  
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C: Jeff Fleischman, Office of Surface Mining  
Lauren Mitchell, Office of Surface Mining

FC: 620.903 (AM3)

## Gilbert, Sharona

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**From:** Gilbert, Sharona  
**Sent:** Friday, February 26, 2016 11:50 AM  
**To:** Dusty Weber  
**Cc:** jfleischman@osmre.gov; lmittchell2@osmre.gov; Bartlett, Franklin P (fbartlett@osmre.gov); Giovetti, Debbie (dgiovetti@osmre.gov); mcalle@osmre.gov; DEQCoal  
**Subject:** C1993017 AM3 Sixth Round Acceptability Deficiency  
**Attachments:** AM3\_AcceptabilityDeficiency\_sixthround\_02-26-16.pdf

Please see attached electronic correspondence. Have a great day!

### Sharona Gilbert

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Industrial & Energy Minerals Bureau  
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*The best laid schemes o' Mice an' Men,  
Gang aft agley ~Robert Burns*