

BHP Navajo Coal Company

11-12-14-08



BHP Billiton Limited
BHP Navajo Coal Company
PO Box 1717
16 Miles South of Fruitland on CR 6675
Fruitland, New Mexico 87416 USA
Tel +1 505 598 4200 Fax +1 505 598 3361
bhpbilliton.com

December 13, 2011

Mr. Mychal Yellowman, Navajo Mine Co-Coordinator
Indian and Federal Programs Team
Office of Surface Mining/Western Regional Coordinating Center
P.O. Box 46667
Denver, Colorado 80201-6667

**Re: Navajo Mine Permit Number NM-0003F; Rev 1105
BNCC Navajo Area IV North Mine Revision (OSM No. NM-0003-F-R03)
Responses to OSM's Comments**

Dear Mr. Yellowman,

BHP Navajo Coal Company (BNCC) is submitting for your review and approval eight (8) copies of its responses to comments made by the Office of Surface Mining Reclamation and Enforcement (OSM) related to the November 17, 2011 Area IV North technical deficiency submittal.

During review of the November 17, 2011 Area IV North Technical Deficiency Response, OSM developed comments which they like to have addressed. A summary of each OSM's comments is described below in italics with BNCC's response following each comment identified.

OSM's Comments:

(1) Address minor clarity concerns listed under 30CFR777.11 (a) (2):

OSM Comment: *"A minor typo was found in table 11-14f of the PHC and Table 3-1 of Appendix 11-VV, this typo is demarcated in the attached copy of Ch. 11."*

BNCC Response: BNCC has revised Table 11-14f and Appendix 11-VV, Table 3-1, to reflect the correct Aquatic & Wildlife Habitat (acute) standard for aluminum of 0.087 mg/l.

OSM Comment: *"Additional locations in the text which require clarification are demarcated in attached copies of Ch. 6, Ch. 7 and Ch. 11; these comments concern minor adjustments. Some specific comments include that for clarity purposes the goodness of fit values associated with Figure 11-38 should be included in the text of section 11.6.2.3.1, and the revised Table 6.4-1 must be*

submitted for review by OSMRE. (a revised Table 6.4-1 was never submitted to OSM).”

BNCC Response: BNCC has revised the selected pages in Chapter 6 (Table 6-1), Chapter 7 (Table 7-7), and Chapter 11 Section 11.6. BNCC has revised the Bitsui-2 well sulfate concentration text to include a goodness of fit discussion in Section 11.6.2.3.1. Additionally, BNCC has included Table 6.4-1, mentioned previously in OSM’s November 8, 2011 Technical Evaluation Comments, with this submittal.

- (2) **OSM Comment:** *“Commit to a date by which the condition of QACW-2B, GM-17, Bitsui-2, and SJKF84 #5 will be assessed for suitability for groundwater monitoring.”*
- (3) **OSM Comment:** *“Commit to a date by which a permit revision to include at least one nested Fruitland well, as described above, will be submitted.”*
- (4) **OSM Comment:** *“Commit to install and operate continuous flow monitoring on Chinde Arroyo at a location downstream of mining activities.”*
- (5) **OSM Comment:** *“Commit to a date by which they will submit to OSMRE a permit revision to include all new surface water monitoring in the surface water monitoring program.”*
- (6) **OSM Comment:** *“Schedule a preliminary meeting with OSMRE to coordinate the following;*
 - a. *Appropriate monitoring locations for verification of the Area I groundwater model.*
 - b. *Location and type of additional monitoring equipment required on Cottonwood Arroyo to characterize and differentiate NAPI influences, and support permanent channel design.”*

BNCC Response: BNCC feels it is beneficial to take a larger holistic view of OSM’s monitoring plan revisions. Therefore, BNCC is proposing a meeting with OSM’s Navajo Mine technical team for February 28, 2012 to discuss OSM’s comments 2 through 6. At the meeting, BNCC will be prepared to discuss the following:

Groundwater monitoring permit revision:

- BNCC’s findings on the condition and sampling suitability of wells QACW-2B, GM-17, Bitsui-2, and SJKF84#5. If these wells are unsuitable for sampling BNCC will propose alternatives.
- The location and proposed installation schedule for a nested Fruitland Well
- BNCC’s anticipated groundwater monitoring permit revision and submittal schedule.

Surface water monitoring permit revision:

- BNCC's proposed location and type of equipment required for flow monitoring along the downstream channel reaches of the Chinde Arroyo.
- BNCC's anticipated surface water monitoring permit revision and submittal schedule.

Instructions for the replacement of updated permit contents follow:

| <u>Revisions</u> | <u>Comments/Instructions</u> |
|---------------------|------------------------------------------------------------------------------------------------------------------------------|
| Ch. 11 Vol.12, PHC | Remove and replace Section 11.6 (Probable Hydrologic Consequences) on pages 11-144 through 11-340 with revised pages. |
| Ch. 3 Vol. 2, Table | Remove and replace Table 3-1 (Batch Leaching Test Results) with revised table. |
| Ch. 6 Vol. 7, Table | Remove and replace Table 6.1 (Aquifer Discharge Characteristics) with revised table. |
| Ch. 7 Vol. 8, Table | Remove and replace Table 7-7 (Summary of Surface Water Monitoring Data – Average Values) with revised table. |
| Ch. 6 Vol. 7, Table | Remove and replace Table 6.4-1 (Non-Navajo Mine wells adjacent to the Lease Boundary) with revised table. |

Additionally to assist with OSM's review, BNCC has provided two CD's containing this response to OSM technical comments.

If you have any questions regarding this submittal, please contact Kent Applegate at (505) 598-3269

Yours sincerely,



C. Kent Applegate
Superintendent NEPA Process

Enclosure – 2 CDs containing the contents of this submittal
(1 CD for OSM / 1 CD for Navajo Nation)