

BHP Billiton Mine Management Company



January 13, 2015

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15-01-14-01

Mr. Mychal Yellowman  
Pinabete Permit Team Leader  
Office of Surface Mining Reclamation and Enforcement  
Western Region Program Support Division  
1999 Broadway, Suite 3320  
Denver, Colorado 80202-3050

**Re: Pinabete Permit (OSM Project Tracking Code NM-0042-A-P-01) Technical Evaluation  
Bonding Comment Response (Pinabete Permit update 1501)**

Dear Mr. Yellowman;

BHP Billiton Mine Management Company (MMCo) is submitting for your review and approval our responses to the remaining bonding technical deficiencies identified in the Office of Surface Mining Reclamation and Enforcement's (OSM) October 28, 2013 technical evaluation.

During the technical evaluation of the Pinabete permit application package (PAP) (OSM Project Tracking Code NM-0042-A-P-01), OSM identified several deficiencies. MMCo submitted responses to OSM's technical deficiencies on December 13, 2013, January 27, 2014, and March 6, 2014. This submittal provides responses to the remaining technical deficiencies associated with Section 50 Bonding. A summary of each technical deficiency is described below.

**OSM's Bond Estimate Technical Evaluation Comments (OSM NO. FPD08554 NM-0042-A-P-01 Bond Estimate TE ARMS12-04-03-01)** (Note: the numbering of each comment relates to MMCo's December 13, 2013 comment response submittal)

**148) OSM Comments (page 2):**

"Sections 20.10, 22.10, 23.4 and 25.5 all state that certified as-built drawings will be kept at the mine site and be made available upon request. However, some federal regulations, including 30 CFR 816.151(a), require that OSM receive as-built drawings as part of the engineer's certified construction report. OSM will evaluate all certified as-built drawings that identify any deviations from the approved design and confirm actual construction. [NTEC] must revise the language in these sections to state that copies of certified as-built drawings will be submitted to OSM for acceptance and field verification."

**MMCo Response:**

This comment was addressed in MMCo's December 13, 2013 Pinabete Technical Evaluation response submittal.

**149) OSM Comment (page 2):**

"Sections 35.5 (Protection and Replacement of Water Rights of Present Users), 33.6 (Post-Reclamation Wells), and 33.7 (Other Post-Reclamation Structures and Facilities) include the statement "[NTEC] may replace the lost water sources should [NTEC] find the water user are still in need of the sources that existed pre-mine". In addition, Sections 35.5 and 33.7 include the statement, "Should the customary land user require alternate water sources after reclamation, [NTEC] may replace livestock impoundments/ ponds affected by mining with post-reclamation/replacement livestock impoundments/ livestock ponds or wells/livestock tanks, as deemed appropriate by [NTEC]." In all sentences, it infers that [NTEC's] replacement of water sources is optional when in fact 30 CFR 816.41(h) requires that the "person who conducts surface mining activities shall replace the water supply of an owner of interest in real property who obtain all or part of his or her supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source, where the water supply has been adversely impacted by contamination, diminution, or interruption proximately resulting from the surface mining activities." **[NTEC] must revise the language in these sections to reflect the requirement of the 30 CFR 816.41(h) which requires [NTEC] to replace every pre-mining water source that has been affected by surface coal mining operations."**

**MMCo Response:**

This comment was addressed in MMCo's December 13, 2013 Pinabete Technical Evaluation response submittal.

**150) OSM Comments (page 3):**

"Section 50.4.1.1, Page 50-2 - This section indicates that there will be no facilities constructed in the Pinabete Mine area, thus there will be no costs associated with demolition of any structures. However, should this change, then unit demolition costs will have to be updated to costs in the current year or be inflated from an older cost-basis. As submitted, Table 50-A-1 and Worksheet 2 both use (even though the amount of demolition totaled \$0) unit costs from 2008 which are out of date. **Update these tables with current costs, or remove these as there are no actual demolition costs included for this application."**

**MMCo Response:**

MMCo has updated the demolition costs to be consistent with the Navajo Mine (OSM Permit No. NM-0003F) bond calculation and current Means Heavy Construction Cost Data (2014 Edition). NTEC is not proposing to construct any facilities within the Pinabete Permit Area,

see Section 50.4.1.1, Page 50-2 of the Pinabete SMCRA Permit Application. Therefore, the demolition costs of facilities within the Pinabete Permit area will remain at \$0. MMCo has elected to leave these worksheets within the electronic bond calculation file in order to maintain the continuity of the electronic bond worksheet links and formulas.

**151) OSM Comments (page 3):**

“Section 50.4.1.2.2, Page 50-4 – [NTEC] states that it assumes 15 work shifts per week in the cost estimate. [NTEC] must apply 15 shifts per week when determining the depreciation factor applied to the equipment hourly costs as described in the Cost Reference Guide's (CRG) Introduction (Section VIII) publication. In addition, other factors that have not been adjusted as directed by the publisher of the CRG are the labor adjustment factor (the CRG wage mechanic wage rate is \$50.76 in the 2nd Half 2012), and fuel adjustment factor (the CRG diesel cost per gallon is \$4.13 in the 2nd Half 2012). These latter factors and calculations are found in Table 50-A-23, and then have been applied to equipment hourly costs throughout [NTEC]'s reclamation estimate.”

**MMCo Response:**

MMCo has revised the bond calculation worksheet to reflect the depreciation from a 15-shift-per-week schedule, as described in the Pinabete SMCRA Permit Application. The result of the depreciation going from a single shift per day schedule to a 15-shift-per-week schedule reduces the overall Pinabete Bond calculation.

Additionally, MMCo has revised the Pinabete bond calculation to reflect the current labor rates as provided by the Cost Reference Guide (CRG) for Construction Equipment (second half 2013 Edition).

**152) OSM Comments (page3):**

“[The] Equipment Operator Wage Rates, shown in Table 50-A-24, are from the 2011 ACME Inc. contract. These wage rates are identical to those included in September 2011 reclamation cost estimate, Table 12-B-24 from the year 2008. **Please verify these wage rates are valid and are in the current labor contract OSM notes that ACME Inc. is not listed by NM Public Regulation Commission as an active corporation, nor with the Navajo Nation as a certified Navajo business.**”

**MMCo Response:**

MMCo has revised the equipment operator wage rates on Table 50-A-24 to the wage rates specified in the 2014 ACME Soil Remediation (ACME), Inc. contract.

**153) OSM Comments (page 4):**

“Update all equipment hourly cost worksheets with the corrected hourly costs based upon revised adjustments to the depreciation, fuel and wage factors as noted in the evaluation of Section 50.4.1.2.2.”

**MMCo Response:**

MMCo has revised all equipment hourly costs worksheets with the corrected hourly costs based upon revised adjustments to depreciation, fuel, and wages factors from the cost Reference Guide for Construction Equipment (second half 2013 Edition). Additionally, these costs are in-line with the Navajo Mine (OSM SMCRA Permit No. NM-0003F) bond calculation.

**154) OSM Comments (page 4):**

"Loader Worksheets 8B & 8C - Both worksheet calculations include use of a bucket fill factor of 1.05 (or 105%) of a full bucket capacity (also included in previous submittals). [NTEC's] use of this fill factor exceeds what is suggested in the Caterpillar Performance Handbook. Use of this over-full bucket capacity results in a more-rapid movement of material and thus lessens the overall time required to move all material, and this fill factor is at a volume beyond that suggested but the equipment manufacturer. **Provide justification for use of this over-full load factor or revise each worksheet to reflect what Caterpillar recommends for use in the movement of the specific material types.** Worksheet 8A uses a more realistic load factor of 0.90 (90%), which makes the bucket capacity 13.5 yards (vs. a full 100% of 15 yards)."

**MMCo Response:**

This comment was addressed in MMCo's December 13, 2013 Pinabete Technical Evaluation response submittal.

**155) OSM Comment (page 4):**

"Truck Worksheets 9B - Worksheet 9B uses a loader capacity in the Hourly Production side of this worksheet of 13.5 yards (or 0.90 of full) and 14 yards (0.93 full) in the Hours Required section of this worksheet. However, both of these loader volumes in this truck worksheets differ from those used by [NTEC] in the associated loader described in Worksheet 8B (15 yards). Redo the truck worksheets to reflect the correct loader use hours."

**MMCo Response:**

This comment was addressed in MMCo's December 13, 2013 Pinabete Technical Evaluation response submittal.

**156) OSM Comments (page 4):**

"Truck Worksheets 9C - Worksheet 9C uses a loader capacity in the Hourly Production side of this worksheet of 16 yards (or 1.067 of full) and in the Hours Required section of this worksheet. The loader volumes shown in this worksheet differ from those used by [NTEC] in the associated loader as described in Worksheet 8C, which uses 15 yards. **Redo the truck worksheets to include the associated loader worksheet.**"

**MMCo Response:**

This comment was addressed in MMCo's December 13, 2013 Pinabete Technical Evaluation response submittal.

**157) OSM Comments (page 4):**

**"Remove blank worksheets 8D-8H, 9D-9J, 11B-1 IF, 14C-14D, and 15D from this cost estimate. Future completed worksheets can be added into the estimate as needed."**

**MMCo Response:**

This comment was addressed in MMCo's December 13, 2013 Pinabete Technical Evaluation response submittal.

**158) OSM Comments (page 4):**

**"Please verify that the cost-per-acre for seedbed preparation used in Worksheets 14A & 14B remains at \$383 per acre remains unchanged since 2009. Also, please verify that the cost for blasting has remained \$0.15/bank cubic yards (bcy) since 2011."**

**MMCo Response:**

MMCo has revised the cost-per-acre for seedbed preparation and inflated the values to 2014 dollars using a factor of 6.2% (<http://inflationdata.com> cumulative inflation calculator – January 2011 to January 2014). The revised cost-per-acre for seedbed preparation on Worksheets 14A and 14B is approximately \$407. MMCo has also inflated the unit cost for blasting from \$0.15/bank cubic yard (2011 dollars) to \$0.19/bank cubic yards (2014 dollars) using the same inflation factor.

**159) OSM Comments (page 5):**

**"Worksheet 15e of Section 50 of the March 2012 reclamation cost estimate indicates the cost to reclaim rip-rap channels and remove drop structures from Area 4 North is \$62,260. This worksheet refers back to the cost estimate used in the Appendix B of the 2009 Navajo Mine reclamation cost submittal. That 2009 submittal had deficiencies and required a resubmission, but was subsequently approved as the 2011 mine-wide reclamation cost estimate (found in Appendix B, worksheet 15a, dated Sept 2011). Both the approved 2011 cost estimate and the proposed March 2012 cost estimate for the Area 4 North structure removal refer back to the original 2009 reclamation cost (Appendix 12-C of that submittal) which used unit costs from the 2009 R.S. Means Heavy Construction Cost. Neither the 2011 nor the 2012 reclamation cost estimate included an inflation factor to update costs to current dollars. **For the current reclamation cost estimate submittal [NTEC] must provide a more current cost for reclamation of the hydrologic control structures, indexed in 2013 dollars."****

**MMCo Response:**

MMCo has revised the cost to reclaim rip-rap channels and drop structures, found on the Pinabete Bond calculation Worksheet 15E, to be consistent with the pending 2014 Navajo Mine (OSM

SMCRA Permit No. NM-0003F) permit revision 1403 Navajo Mine Bond Update (submitted May 15, 2014). This revision increased the costs from \$62,260 to \$109,963.

Instructions for the replacement of the revised Pinabete Permit Application Package follow:

**Part 7- Bonding**

**Section 50- Bonding**

- Overwrite the "Table 50.4-1.docx" file found in the Section 50 Tables directory with the revised "Table 50.4-1.docx"
- Overwrite the "Appendix 50.A.pdf" file found in the Section 50 Appendices directory with the revised "Appendix 50.A.pdf" file.

If you have any questions, please contact me at 505-598-3269.

Sincerely,



**C. Kent Applegate**

Superintendent Environmental Projects

CC: Clark Moseley, NTEC Chief Executive Officer

Enclosure: CD