

January 23, 2015

Mr. Mychal Yellowman  
Pinabete Permit Team Leader  
Office of Surface Mining Reclamation and Enforcement  
U.S. Department of the Interior  
1999 Broadway, Suite 3320  
Denver, CO 80202-3050



**Re: MMCo Responses to Pinabete Permit (OSM Permit No. NM-0042-A-P01) Paleontological Resources and Wildlife Technical Evaluations (Pinabete Permit Revision 1502)**

Dear Mr. Yellowman:

BHP Billiton Mine Management Company (MMCo) submits for your review and approval a revision to the Pinabete Permit Application Package (OSM Permit No. NM-0042-A-P01). This revision is in response to two Office of Surface Mining Reclamation and Enforcement (OSM) technical evaluations of the Pinabete Permit. The first technical evaluation addressed is the paleontological resource evaluation (OSM ARMS No 12/04/03-01, received on December 16, 2014). The second technical evaluation is the fish and wildlife evaluation (OSM AMRS No. 13/12/16-33, received on January 14, 2015).

OSM will notice additional edits ( track changes) within the submitted documents unrelated to the recent paleontological and wildlife technical evaluations. MMCo has based this submittal on the previous revision packages submitted to OSM as part of the technical review process for the Pinabete Permit Application Package (PAP).

Responses to OSM's paleontological resources and fish and wildlife evaluations follow:

**OSM's Paleontological Resources Technical Evaluation Comments (OSM No, FPD088653 NM-0042-A-P01 Paleontological Resources TE ARMS 12/04/03-01)**

**OSM Comment:** "NTEC should revise the PAP to reflect the use of the [Paleontological Resources Management Plan (PRMP)]. This revision may be accomplished by either referencing or including the entire PRMP document in the PAP."

**MMCo Response:**

MMCo has revised Section 17 Geology, Section 40 Environmental Protection, and Section 42 Monitoring, Maintenance, Inspections, and Examinations to include references to the PRMP. Additionally, MMCo has included the PRMP as a confidential appendix to Section 17, per Title 30 of the Code of Federal Regulations Section 773.6(d)(3) and the Paleontological Resources Protection Act (P.L. 111-011 Section 6309). MMCo will be submitting this confidential appendix to OSM as a separate submittal, and requests OSM maintain this appendix as confidential information.

**OSM Comment:** "NTEC should revise the PAP to state that the PRMP will be used to manage any paleontological resources newly discovered during pre-mining activities to include grubbing, clearing, and removal of topsoil."

**MMCo Response:**

MMCo has revised Section 40 Environmental Protection and Section 42 Monitoring, Maintenance, Inspections, and Examinations to include the use of the PRMP to investigate the completed topdressing removal areas for the presence of paleontological resources. This process is in agreement with discussions between Navajo Nation Minerals Department and OSM.

**OSM Comment:** During pre-mining and related operations, the find will be reported to [Navajo Nation Minerals Department (NNMD)] and [OSM] immediately. Pre-mining operations will be suspended within 100 feet of the discovery. The mine management will arrange for the find to be professionally investigated within 2 days of the discovery. This professional investigation begins at the Paleontological Inventory stage of the PRMP. The NNMD with mine management will determine the paleontological professional to follow the PRMP. An evaluation of the paleontological discovery will be made by the paleontological professional within five working days, weather permitting, to determine the significance and potential mitigation as outlined in the PRMP. The NNMD will issue appropriate permits and any recovered materials remain the property of the Navajo Nation. Paleontological specimens shall be curated at the Museum of Northern Arizona, per a Navajo Nation Memorandum of Understanding, yet Navajo Nation retains ownership. Operations within 100 feet of such discovery will not be resumed until written authorization to proceed is- issued by [OSM]. The permittee will bear the cost of any required curation, paleontological evaluations, surface collections of fossils, and salvage of any large conspicuous fossils of significant interest discovered during the operation that require mitigation under the PRMP.

**MMCo Response:**

MMCo has revised Section 42 Monitoring, Maintenance, Inspections, and Examinations to include the use the process proposed by OSM on topdressing removal areas to survey for the presence of paleontological resources. This process is in agreement with discussions between Navajo Nation Minerals Department and OSM.

**OSM's Fish and Wildlife Technical Evaluation Comments (OSM No. FPD08653 NM-0042-A-P01 Fish and Wildlife TE ARMS 13/12/16-33)**

**OSM Comment:** "In Section 16 (Fish and Wildlife), both the Southwest Willow Flycatcher (*Empidonax traillii extimus*) and the Yellow-Billed Cuckoo (*Coccyzus americanus*) are shown in Table 16.2-1, which lists, "U.S. Fish and Wildlife Service (USFWS) and Navajo Natural Heritage Program (NNHP) Listed Species with the Potential to Occur in Area 4 North, Area 4 South, and Area 5." However, Appendix 42.B does not list either species as having the potential to occur. **This conflict is a deficiency; and thus needs to be corrected in the PAP by adding both species to Appendix 42.B also.**"

**MMCo Response:**

MMCo has revised the text in Appendix 42.B (page 42.B-1) to state, "Both the Southwest willow flycatcher (*Empidonax traillii extimus*) and the yellow-billed cuckoo (*Coccyzus americanus*) have the potential to occur within the permit area."

**OSM Comment:** "... as an administrative housekeeping item; OSMRE noted many references to BNCC in the Pinabete PAP that should be changed to NTEC."

**MMCo response:**

On July 7, 2014, MMCo submitted a permit revision (Pinabete Permit Revision 1402) which revised the Pinabete Permit Application Package to reference the Navajo Transitional Energy Company as the owner of Navajo Mine and applicant for the Pinabete Permit Application Package (Pinabete Permit). This revision updated the owner and applicant throughout the Pinabete Permit. Upon MMCo internal review, we discovered the un-revised Section 34 Post-mining Topography section text was inadvertently submitted in the July 7, 2014 submittal. MMCo has revised the ownership and applicant information in Section 34 section text and is submitting it for OSM's review.

**OSM Comment:** "The words, "and wildlife habitat," needs to be added in several places as indicated below to explicitly state that wildlife habitat is also post mine land use concurrent with livestock grazing."

**In Section 33.6 add the words, "and wildlife habitat," to the sentence, so it reads: "The replacement well, will be completed into an undisturbed similar water-bearing unit to provide comparable water quantity for use in livestock watering to support the post-mine land use of grazing and wildlife habitat".**

Likewise, the 2nd to last sentence in the first paragraph of Section 33.7 to read, "*The replacement livestock ponds or tanks will provide comparable water quantity for use in livestock watering and wildlife habitat.*"

**MMCo Comment:**

MMCo has addressed the text in Section 33.6 (page 33-2) and Section 33.7 (page 33-3) to address OSM's comments.

**OSM Comment:** Section 35.5 makes the following commitments:

*"After mining operations are completed, [NTEC] will replace the four livestock impoundments affected by mining with post-reclamation livestock permanent impoundments. Post-reclamation impoundments will be constructed near original pre-mining locations as specified in Exhibit 18.1-2. The placement of post-reclamation impoundments in pre-mining locations will depend on watershed characteristics and surrounding topography suitability. Permanent impoundment location selection will be based on sufficient watershed size to provide sufficient water retention to support seasonal livestock watering."*

Finally OSMRE also requests two sentences in Section 35.5 be changed to read, "*Permanent impoundment location selection will be based on sufficient watershed size to provide sufficient water retention to support seasonal livestock watering and wildlife habitat,*" and; "*The replacement*

*livestock impoundments or wells will provide comparable water quantity and quality for use in livestock and wildlife watering to pre-mine impoundments."*

**MMCo Comment:**

MMCo has revised the text in Section 35.5 (page 35-8) to address OSM's comments.

**MMCo Additional Comments:**

MMCo has taken this opportunity to revise the text in Section 40.10 and Appendix 42.B to address the protection of raptors from electrocution. NTEC's Biological Resources Compliance Form from the Navajo Nation Department of Fish and Wildlife (NNDFW) stipulated that "All proposed power line along the perimeter of the mine lease and within the Pinabete Permit Area shall be constructed with raptor-safe pole design per [NNDFW] Raptor Electrocution Prevention Regulations (REPR). All guy wires shall be marked with highly visual daytime markers to prevent bird collisions with the [raptor sensitive area]." MMCo understands the raptor sensitive area to be the Pinabete Permit area. MMCo had previously updated the language in Section 22.5 (Pinabete Permit revision 1401b, submitted to OSM on 3/11/2014) to address this stipulation. The revisions to Section 40.10 and Appendix 42.B harmonize the raptor protection measures in these Sections to the language in Section 22.5.

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

**Part 2 Premining Environmental Resources Information**

Section 17 Geologic Information

- Overwrite the "Section 17 Geologic Information.docx" section text file with the revised "Section 17 Geologic Information.docx" section text file.
- Insert the new "Appendix 17.F.pdf" file into the Section 17 Appendices ("Sec. 17 Appendices") directory.

**Part 5 Reclamation Plan**

Section 33 Post-Reclamation Roads, Buildings, Facilities, and Other Structures

- Overwrite the "Section 33 Post-Reclamation Structures.docx" section text file with the revised "Section 33 Post-Reclamation Structures.docx" section text file.

Section 34 Post-Reclamation Topography

- Overwrite the "Section 34 Post-Reclamation Topography.docx" section text file with the revised "Section 34 Post-Reclamation Topography.docx" section text file.

Section 35 Hydrologic Reclamation Plan

- Overwrite the "Section 35 Hydrologic Reclamation Plan.docx" section text file with the revised "Section 35 Hydrologic Reclamation Plan.docx" section text file.

**Part 6 Environmental Protection, Probable Hydrologic Consequences, and Monitoring**

Section 40 Environmental Protection

- Overwrite the "Section 40 Environmental Protection.docx" section text file with the revised "Section 40 Environmental Protection.docx" section text file.

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Section 42 Monitoring, Maintenance, Inspections, and Examinations

- Overwrite the "Section 42 Mon, Maint, Insp.docx" section text file with the revised "Section 42 Mon, Maint, Insp.docx" section text file.
- Overwrite the "Appendix 42.B.docx" file found in the Section 42 Appendices ("Sec. 42 Appendices") with the revised "Appendix 42.B.docx" file.

If you have any questions, please contact Matt Owens at 505-598-3229

Sincerely,



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C. Kent Applegate  
Superintendent, Environmental Projects  
BHP Billiton Mine Management Company

Enclosure: CD

Cc: Clark Moseley, Navajo Transitional Energy Company