

February 12, 2004

Mr. Jerry Gavette
Office of Surface Mining
Reclamation and Enforcement
1999 Broadway, Suite 3320
Denver, CO 80202-5733

RE: Black Mesa and Kayenta Mine Life-of-Mine Plan Extension

Dear Mr. Gavette:

The enclosed submittal contains revision materials for the Black Mesa Mine Permanent Program Permit application and the Kayenta Mine Permanent Program Permit AZ-0001D. This application seeks regulatory authorization to extend mining an additional 20 years to ensure adequate and uninterrupted fuel supplies for both the Mohave and Navajo Generating Stations into the future, and to combine the Black Mesa Mine Interim Program Permit area with the Kayenta Mine Permanent Program Permit area such that both mines are covered by a single Permanent Program Permit as originally intended in the Permanent Program Permit filing submitted by Peabody in 1985. Approval of this submittal is needed by October 2005.

There are five major elements to this submittal. First, it includes new mine plans extending the life of both mines. Second, the Black Mesa Mine plan reflects an increase in the rate of coal production and an increase in water use for coal transportation to accommodate anticipated increased coal demand at the Mohave Generating Station (MGS) after 2007. Third, it includes a coal washing facility needed at the Black Mesa Mine by approximately 2008 in order to meet the anticipated future coal quality requirements of MGS. Fourth, it includes new environmental baseline information collected in the future coal resource areas to augment the existing environmental baseline studies and ongoing environmental monitoring results. Finally, it includes an analysis of the probable hydrologic consequences on the Navajo aquifer of using a different source of water to supply a significant portion of the mines' operational needs. Each of these elements is discussed in further detail below.

#### Life-of Mine Plans - Black Mesa and Kayenta Mine

Peabody Western Coal Company (PWCC) submitted a Permanent Program Permit Application Package (PAP) in 1985 for the entire Black Mesa Complex. At that time PWCC sought to obtain authorization to mine for a period of time coincident with the coal supply agreements with the owners of MGS and the Navajo Generating Station (expiring in 2005 and 2011, respectively). Now, as the coal supply agreement renewal dates approach, it is time to prepare both mines to supply coal to these customers when the terms of the coal supply agreements are extended.

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The existing leases with the Navajo Nation and the Hopi Tribe entitle PWCC to mine 670 million tons of coal. With this submittal, PWCC seeks to permit all of the potentially economical surface-recoverable reserves within the existing lease boundary (approximately 803 million tons, of which about 317 million tons have been mined as of January 1, 2003, based on analysis of best available coal exploration data), recognizing that coal mining above and beyond the currently approved maximum tons in the leases (670 million tons) would be subject to tribal authorization. Thus, the mine plans in this submittal assume the Kayenta Mine will continue for at least fifteen years beyond the currently approved life-of-mine, and the Black Mesa Mine will continue for at least an additional 20 years. PWCC requests the Office of Surface Mining Reclamation and Enforcement (OSMRE) consider all the surface-recoverable reserves and all coal resource areas in the leases when conducting its review and approval activities including the appropriate National Environmental Policy Act compliance activities.

The Black Mesa Mine plan includes mining the J-23 reserves, so a transportation corridor will be needed to haul the J-23 coal to the coal preparation area. Two alternative alignments are contained in this application: one completely on Navajo Nation surface, and one completely on Hopi Tribe surface. PWCC plans to utilize only one right-of-way, and ultimately permit and construct only one transportation corridor. Until such time as a final decision is made on which alignment is most cost effective to construct, both alignments must be evaluated in OSMRE's review of the application. PWCC recognizes that no disturbance can be authorized until the proper right-of-entry is demonstrated.

#### **Black Mesa Mine Coal Production**

The Black Mesa Mine plan assumes mining continues uninterrupted after 2005. After 2007, the mine plan reflects an increase in the annual rate of production of up to 6.2 million tons of coal, and shipments of up to approximately 5.6 million tons of cleaned coal per year. The increased production rate reflects anticipated increased coal consumption at the MGS that is attributable to the installation of additional emission control systems at the plant that may come on line by 2008. The MGS is expected to be capable of consuming approximately 5.6 million tons per year at full burn after the new emission controls are installed. The increased production rates are also attributable to the need to supply the MGS with a washed coal product in order to meet MGS's coal quality requirements after the new emission systems are in place. Coal production and shipments at the Black Mesa Mine in 2006 and 2007 will remain at current rates (approximately 4.6 million tons per year).

#### Black Mesa Mine Coal Washing Facility

This application includes a coal washing facility at the Black Mesa Mine, needed in order to meet the future coal quality requirements of the MGS. The proposed coal washing facility will be located adjacent to the existing coal preparation facilities at the Black Mesa Mine, and must be fully operational by 2008. The capacity of the plant will slightly exceed the maximum

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anticipated coal production rate. The refuse from the plant will be disposed of on-site, in previously mined pits. Approximately 40 percent of the refuse is expected to be coarse containing about 7 percent moisture after dewatering using centrifuges or vibrating screens. The remaining 60 percent of the refuse is expected to be ultra-fine refuse that will be dewatered using belt presses and mixed with the coarse refuse prior to disposal. The dewatered moisture content of the ultra-fine refuse will be about 40 percent. Thus, PWCC is not proposing any coal refuse disposal ponds (i.e., coal slurry ponds) in this application. A detailed analysis of the probable hydrologic consequences of disposal of the coarse and fine refuse mixture is contained in this application which clearly shows that proper disposal, as designed in this proposal, in the mined out pits will not cause any adverse impacts.

#### Environmental Baseline Information

This application contains additional environmental baseline data for the future coal resource areas within the existing leasehold to augment the substantial environmental monitoring and baseline studies information that has been amassed over the past 24 years. This data includes baseline information on vegetation, wildlife, soils, and overburden collected in accordance with plans proposed by PWCC and approved by OSMRE pursuant to letters dated May 7, 2003 (vegetation) and June 25, 2003 (soils, overburden, and wildlife). All of the additional environmental information necessary to permit the potentially surface-recoverable reserve, based on currently available exploration information, is contained in this application.

#### Black Mesa and Kayenta Mine Water Supply

The OSMRE approved the 1985 Permit Application Package for the Black Mesa and Kayenta Mines as it pertained to the Kayenta Mine and the Navajo Generating Station coal supply only in July 1990 (Permit AZ-0001D), but placed the decision as it pertained to the Black Mesa Mine and MGS coal supply on administrative delay. The administrative delay on the Permanent Program Permit decision as it pertains to the Black Mesa Mine and the MGS coal supply now approaches 14 years and is overdue. PWCC's use of the Navajo Aquifer, while authorized in the leases with the Navajo Nation and Hopi Tribe, remains the central issue resulting in the delay of the Black Mesa Mine portion of the Permanent Program Permit AZ-0001D. The delay continues, irrespective of the incontrovertible technical information to support the conclusion that potential hydrologic consequences of PWCC's past, present, and potential future usage of the Navajo aquifer, even at the increased level needed to meet future operational requirements, are negligible.

Nevertheless, PWCC and the owners of MGS recognize the sensitivities surrounding continued reliance on the Navajo Aquifer to supply all of the mines' water requirements. So the parties are committed to seeking an alternative source of water to supply most of the mines' requirements.

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A potentially viable tribal water source has been identified. This source would consist of a new wellfield tapping the Coconino aquifer underlying Navajo Nation reservation lands and other privately held lands owned and controlled by the Hopi Tribe, and a distribution system ultimately supplying the mines with up to 6,000 acre feet of water per annum. The new wellfield would be located about 140 miles south of the Black Mesa leasehold, and is being evaluated for development to serve tribal municipal as well as industrial needs. Funding has been identified to confirm the viability of the water source, and develop information needed to assess the affects of using the source. The existing Navajo aquifer wellfield would continue to be used until the new source becomes available (2008, in this submittal). After the new source is available, the Navajo aquifer wellfield would continue to be maintained in a fully operational status for emergency use if, for any reason, the new source becomes unavailable. In addition, the Navajo aquifer wellfield will be needed on an ongoing basis to supply a portion of the mine potable needs and possibly a portion of its dust suppression needs as well, especially at Kayenta Mine. Thus, it is anticipated the Navajo aquifer wellfield would continue to operate, although at reduced capacity.

New information is provided in revised Chapter 18, Probable Hydrologic Consequences assessing the potential affects of this new pumping regimen on the Navajo aquifer. Two new pumping scenarios are analyzed. The first scenario assumes limited maintenance pumping and a projected emergency use regimen. The second scenario is similar to the first, except an additional 1,000 acre-feet per year is included in the projection to account for all of Kayenta Mines' water for the life of the operation.

Enclosed are insertion instructions for updating the PAP, the notarized verification statement, and eleven copies of the revised materials. If you have any questions, please don't hesitate to contact me.

Sincerely,

Randy Lehn

Manager, Mine Engineering and Reclamation

Enclosures

c:

B. Dunfee

J. Wasik

C. Scott Williams

# **VERIFICATION**

I verify under oath that the information contained in this application for a permit; revision; renewal; or transfer, sales or assignments of permit rights is true and correct to the best of my information and belief.

Signature of Responsible Official Hary W. Wendt
,
Title Supervisor, Environmental Program Date February 12, 2004
SUBSCRIBED AND SWORN TO BEFORE ME BY Gary W. Wendt
This 12th Day of February, 2004
NOTARY PUBLIC James D. Schlenvogt
MY COMMISSION EXPIRES April 9, 2004
OFFICIAL SEAL  JAMES G. SCHLENVOGT  NOTARY PUBLIG STATE OF ARIZONA

COCONINO COUNTY

My commission expires April 9, 2004.

## Life-of Mine (LOM) Mine Plan Permit Revision

## **Black Mesa and Kayenta Mines**

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<u>Volume</u>	<b>Chapter</b>	<b>Description</b>
1		Replace the existing index pages iv through viii with the revised pages.
1	2	Replace the existing page 2 with the revised page 2. Replace existing Page 5 with revised page 5.
1	3	Replace the existing title page through 11 with the revised title page through 13.
1	3	In Attachment 1, replace the existing text with the revised text.
1	3	In Attachment 6, replace the existing title page and text pages 1, 2, 9, and 10 with the revised pages.
1	4	Replace the existing title page, index pages i, ii, iii, and text pages 29, 30, and 37 through 43 with the new title page, index pages i, ii, iii, and text pages 29, 30, and 37 through 55.
1	5	Replace the existing Chapter 5 with new Chapter 5.
1	6	Replace the existing Chapter 6 with new Chapter 6.
8	8	Replace the existing title page through 33 with the revised title page through 40.
8	9	Replace the existing index page iii and text pages 1 through 4 and 79 through 94 with the revised pages. Following existing Attachment 3, insert new Attachments 4, 5, and 6.

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<u>Volume</u>	<b>Chapter</b>	<u>Description</u>
8	10	Replace existing index page iv and existing text page 3 with the revised pages. Following existing Attachment 3, Insert new Attachments 4, 5, and 6.
8	14	Replace existing text pages 28, 29, 29a, and 30 with the revised pages.
9	15	Replace the first, second, and last pages of the existing Index and preface (i) with the revised pages.
10	15	Insert the new Attachment 25 following the existing Attachment 24.
11	16	Replace the existing pages 17 through 22 with the revised pages.
11	17	Replace the existing pages 5 through 8, 13, 14, 17 through 22, and 37 with the revised pages.
11	18	Replace all existing Index pages with the revised pages. Replace the existing text pages 1,2, 15 through 18, and 20 through 84 with the revised pages. Place the existing page 19 (map insert) between the revised pages 22 and 24. Insert the new Attachments 2 and 3 following the existing Attachment 1.
11	19	Replace the existing Index and pages 1 through 19 with the revised pages.
11	20	Replace the entire existing Chapter 20 with the new Chapter 20 document.

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<u>Volume</u>	Chapter	<u>Description</u>
11	22	Replace the existing title page through 47 with the revised title page through 51.
11	23	Replace existing text pages 49 and 50 with the revised pages.
11A	25	Replace the existing text pages 7 through 9 with the revised pages 7 through 10.
11A	Appendix A	Insert the new Appendix A-1 after the existing A, Attachment 7.
12	Appendix B	Replace the existing index page with the revised index page (Page B-1).
12	Appendix B	Insert the new title page (J-28 Mining Area – Deep Cores) and pages 517 through 638 after existing page 516.
13		Replace the existing Drawing No. 85100 with the revised drawing.
13		Discard N-10 Area Geologic Cross Section No. 1 and No. 2
14		Insert new Drawings J-2, J-4, J-6, J-8, J-9, J-10, and J-14 "Typical Geological Cross Section"
15		Insert new Drawings J-15, J-23, J-28, N-9, and N-10 "Typical Geological Cross Section"

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<u>Volume</u>	Chapter	<b>Description</b>
18		Replace the existing Drawing No. 85210 (4 sheets) with the revised drawings. Remove and discard Drawing No. 85210A.
19a		Insert new drawing No. 85305C "Soil Type and Topsoil Salvage Map" for J-2/J-15, J-4, J-6/J-14, J-8, J-9/J-10, J-23, J-28, N-9, and N-10 in new Volume 19a. (Use old Volume 16 Binder)
19		Move Drawing No. 85305B sheets 7 of 15 through 15 of 15 to the front of new Volume 19a.
20		Replace the existing Drawing No. 85324 with the revised drawing. Move Drawing No. 85360 "Silo Sheet" and "Silo South Sheet" to new Volume 20b. (create with old Volume 17 Binder). Discard old Drawing No. 85351 (2 sheets). Discard Drawing No. 85360, sheets NW, SW, NE and SE. Discard Drawing No. 85360A.  Insert new Drawing No. 85351 "J-2 Drill Hole Collar Location Map" after Drawing No. 85324.  Insert new Drawing No. 85351 "J-4 Drill Hole Collar Location Map" after J-2.  Insert new Drawing No. 85351 "J-6 Drill Hole Collar Location Map" after J-4.  Insert new Drawing No. 85351 "J-8 Drill Hole Collar Location Map" after J-6.  Insert new Drawing No. 85351 "J-9 and J-10 Drill Hole Collar Location Map" after J-6.  Insert new Drawing No. 85351 "J-14 Drill Hole Collar Location Map" after J-9.  Insert new Drawing No. 85351 "J-15 Drill Hole Collar Location Map" after J-9 and J-10.  Insert new Drawing No. 85351 "J-15 Drill Hole Collar Location Map" after J-9 and J-10.  Insert new Drawing No. 85351 "J-15 Drill Hole Collar Location Map" after J-9 and J-10.

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<u>Volume</u>	Chapter	<b>Description</b>
20b		Insert new Drawing No. 85351 "J-19 Drill Hole Collar Location Map" in the front of the Volume.  Insert new Drawing No. 85351 "J-21 Drill Hole Collar Location Map" after J-19.  Insert new Drawing No. 85351 "J-23 Drill Hole Collar Location Map" after J-21.  Insert new Drawing No. 85351 "J-28 Drill Hole Collar Location Map" after J-23.  Insert new Drawing No. 85351 "N-6 Drill Hole Collar Location Map" after J-28.  Insert new Drawing No. 85351 "N-9 Drill Hole Collar Location Map" after N-6.  Insert new Drawing No. 85351 "N-10 Drill Hole Collar Location Map" after N-6.  Insert new Drawing No. 85360, sheets NW, SW, NE and SE.
21		Replace the existing Drawing No. 85400 sheets K-6, K-7, K-8, K-9, K-10, K-11, L-6, L-7, L-9, L-10, L-11, M-10, M-11, and N-8 with the revised sheets.
22		Replace the existing Drawing No. 85405, sheet 2 of 2, Drawing No. 85406, Drawing No. 85408, sheet 1 of 6, 2 of 6, 3 of 6, 5 of 6, and 6 of 6 with the revised drawings. Insert new Drawing No. 85613A following the existing Drawing No. 85613.
23		Replace the existing Drawing No. 85642 (4 sheets) and Drawing No. 85642A (4 sheets).