## **SECTION 32**

## TEMPORARY STRUCTURES AND FACILITIES REMOVAL AND RECLAMATION

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### **SECTION 32**

## TEMPORARY STRUCTURES AND FACILITIES REMOVAL AND RECLAMATION

## LIST OF REVISIONS DURING PERMIT TERM

REV. DATE

NUMBER REVISION DESCRIPTION APPROVED

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## SECTION 32 TEMPORARY STRUCTURES AND FACILITIES REMOVAL AND RECLAMATION

#### 32.1 Roads Removal and Reclamation

BHP Navajo Coal Company (BNCC) does not plan to retain any of the mine roads associated with the Pinabete Mine Plan permit area for post-mining land use; however, prior to removal of roads BNCC will consult with the Navajo Nation and identify any roads that the Navajo Nation would like retained. If any roads are to be retained, the permit application package will be changed to reflect the permanent status of the roads. Consequently, the following reclamation measures are planned:

- 1. Where a road traverses otherwise undisturbed land, the natural drainages will be restored unless reestablishment would not enhance environmental values;
- 2. All culverts will be removed along with the removal of the associated road. The culverts will be salvaged or recycled, if possible, otherwise they will be disposed in accordance with Section 20.6;
- 3. Roadbeds will be ripped, plowed, and scarified;
- 4. Fill slopes will be ripped and rounded or reduced and shaped to conform to the surrounding terrain and to meet natural drainage restoration;
- 5. Cut slopes will be shaped to blend with the regraded or natural contour;
- 6. Regraded surfaces will be covered with topdressing and revegetated according to the reclamation plan outlined in Section 36 (Post-Reclamation Soil) and Section 37 (Post-Reclamation Vegetation) of this permit application package.

The anticipated removal dates of road segments are provided in Tables 23.2-1 and 23.3-1. The dates shown are the dates when the road segments are no longer required and removal can begin. Road segments that are in front of the advancing active pits will be mined out according to the mine plan. For additional information on primary and ancillary roads refer to Section 23 (Roads).

#### 32.2 Coal Transportation Facilities Removal and Reclamation

Upon completion of mining, the mine support facilities and roads will become the property of the Navajo Nation, as specified in BNCC's lease agreement. Any facilities and roads that the Navajo Nation does not want to maintain will be removed. Following removal, the affected areas will be regraded, topdressed, and revegetated as specified in Part 5 (Reclamation Plan) of this permit application package. For additional information on transportation and facilities refer to Section 22 (Support Facilities).

#### 32.3 Coal Stockpiles and Preparation, Processing, and Loadout Facilities Removal and Reclamation

Upon completion of mining, the coal preparation, processing, loadout, and stockpile/storage facilities will become the property of the Navajo Nation, as specified in BNCC's lease agreement. Any facilities that the Navajo Nation does not want to maintain will be removed. Following removal, the affected areas will be regraded, topdressed, and revegetated as specified in Part 5 (Reclamation Plan) of this permit application

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package. For additional information on coal preparation, processing, loadout, and stockpile/storage facilities refer to Section 22 (Support Facilities).

#### 32.4 Buildings and Support Facility Areas Removal and Reclamation

Upon completion of mining, the buildings and support facility areas will become the property of the Navajo Nation, as specified in BNCC's lease agreement. Any facilities that the Navajo Nation does not want to maintain will be removed. Following removal, the affected areas will be regraded, topdressed, and revegetated as specified in Part 5 (Reclamation Plan) of this permit application package. For additional information about buildings and support facility areas refer to Section 22 (Support Facilities).

#### 32.5 Water, Sewage, and Other Utility Facilities Removal and Reclamation

Upon completion of mining, water, sewage, and other utility facilities will become the property of the Navajo Nation, as specified in BNCC's lease agreement. Any facilities that the Navajo Nation does not want to maintain will be removed, including all wet utilities located above or below ground surface. Following removal, the affected areas will be regraded, topdressed, and revegetated as specified in (Part 5 Reclamation Plan) of this permit application package. For additional information about water, sewage, and other utility facilities refer to Section 22 (Support Facilities).

#### 32.6 Pipelines, Electrical Lines, and Communications Facilities Removal and Reclamation

Upon completion of mining, pipelines, electrical lines, and communications facilities will become the property of the Navajo Nation, as specified in BNCC's lease agreement. Any facilities that the Navajo Nation does not want to maintain will be removed, including all dry utilities located above or below ground surface. Following removal, the affected areas will be regraded, topdressed, and revegetated as specified in Part 5 (Reclamation Plan) of this permit application package. For additional information about pipelines, electrical lines, and communications facilities refer to Section 22 (Support Facilities).

# 32.7 Exploration Holes, Boreholes, Wells, and Other Underground Openings, Sealing and Reclamation

Exploration holes, boreholes, and wells will be backfilled and sealed using the following criteria to eliminate hazards to people, environment, and machinery.

- Exploration holes or wells located in areas planned for mining will be backfilled and sealed using cuttings and/or bentonite "hole plug".
- Exploration holes or wells located outside of areas planned for mining and where water is not encountered will be backfilled and sealed using cuttings and/or bentonite "hole plug" to approximately 5 feet from the collar and then stemmed to the top with concrete grout.

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• Exploration holes or wells located outside of areas planned for mining and where water is encountered will be backfilled and sealed with concrete grout from the bottom of the hole to at least 20 feet above the top of the uppermost water-bearing stratum. The hole will then be filled with cuttings and/or bentonite "hole plug" to approximately 5 feet from the collar and then stemmed to the top with concrete grout.

All drilling locations and associated access roads will be reclaimed as soon as practicable upon completion of the drilling program. In the event mud pits are excavated at the drill site, the collected wet cuttings and/or drilling mud will be allowed to dry before being covered with excavated material and the replacement of any salvaged soil. Reclamation of the drilling locations and access roads will consist primarily of disking, seeding, and mulching the drill sites. Seed mixes are described in Section 37 (Post-Reclamation Vegetation).

Any abandoned underground openings found during mining will be fenced or filled with spoil or other earthen materials using available mining equipment to minimize health, safety, and environmental hazards.

For additional information about temporary sealing of boreholes, wells, and other underground openings refer to Section 40 (Environmental Protection). Also, refer to Section 22 (Support Facilities) for additional information about exploration holes, boreholes, and wells.

#### 32.8 Other Structures and Facilities Removal and Reclamation

Upon completion of mining, other structures and support facilities will become the property of the Navajo Nation, as specified in BNCC's lease agreement. Any structures or facilities that the Navajo Nation does not want to maintain will be removed. Following removal, the affected areas will be regraded, topdressed, and revegetated as specified in Part 5 (Reclamation Plan) of this permit application package. For additional information about explosives handling, storage facilities, non-coal mine waste storage areas, air and water pollution control facilities refer to Section 22 (Support Facilities).

#### Personnel

Persons or organizations responsible for data collection, analysis, and preparation of this permit application package section:

Ron Van Valkenburg Kent Applegate BHP Navajo Coal Company

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