

OTTER CREEK MINE

EXHIBIT 308C: MINE FACILITIES

1.0 Introduction

This Exhibit describes mine facilities other than sediment control facilities and transportation facilities, which are addressed in detail in Exhibits 315A – Ponds and Embankments, and 321A – Transportation Facilities, respectively. The requirements of ARM 17.24.308(1)(b) are addressed, as are the performance standards of ARM 17.24.609. Mine facilities are shown on Map 8 – Mine Plan, and Map 9 – Mine Facilities.

2.0 General Description of Mine Facilities

At the time of initial mine permit application submittal, mine facility locations and arrangements are conceptual only, pending final design engineering. Due to the configuration of the Otter Creek coal tracts, there is limited room for facility placement that will not overlie mineable coal, and at the same time avoid the valley bottoms of Otter Creek and its tributaries. Final engineering designs will proceed when locations and general arrangements are approved.

2.1 Coal Handling and Loading Facilities

The truck dump and primary crusher unit is located adjacent to the box cut along the main haul road to facilitate access and minimize haul distances. End-dump trucks will dump into dual bins feeding dual primary crushers; redundancy is built in to allow coal production if one crushing line is down. Primary crushers will crush the coal to a top size of six to eight inches; each crushing line will have a capacity of 5,000 tons per hour (tph).

The primary crushers will feed a 4,300-foot overland conveyor sized to carry 5,000 tph, which will probably require a belt width of 84 inches, depending on belt speed. Coal will be conveyed to a transfer station and transferred to a second 4,900-foot belt across the Otter Creek valley and Highway 484 to a secondary crusher inside the rail loop. Like the primaries, the secondary crushers will employ dual crushers of 5,000 tph capacity each. Secondary crushing will crush the coal to a top size of three inches, and a third belt will carry the coal to the top of two storage silos, each of 15,000-ton capacity. Trains will be gravity loaded from the silos at a rate of 7,000 tph.

Conveyors will be covered and transfer points and crushers enclosed to control dust. The belt will be enclosed over the highway and railroad. The truck dump station will employ dust curtains enclosing the dumping operation and a fogging system; fogging systems will also be utilized at the train loading point. Crushers, transfer points and the silos will be equipped with containment and drainage sumps to capture coal dust and lubricants from normal operation and washdown, isolating them from the surface drainage system.

The rail loop has been arranged to place the silos and train loadout on the west side of the loop away from Otter Creek. Both the silos and secondary crusher are located to facilitate drainage control using small ponds.

Coal will receive no preparation other than crushing to sales contract size specifications. There will be no coal processing waste requiring storage or disposal.

2.2 Support Facilities

Support facilities include: the offices and change house, warehouse and shop, including ready line; fueling station; wash bay; Ammonium Nitrate/Fuel Oil (ANFO) storage; explosives magazine and waste disposal pit. All of these facilities will be located on Tract 2 near the north end of the box cut. The site will be graded to drain southward toward the mine area and pond EP1A. This location was chosen to keep these facilities removed from Otter Creek and to facilitate drainage control within the internal mine drainage system.

The shop area will have a wash bay for heavy equipment. The wash bay will be designed and constructed to meet best technology currently available (BTCA) and recycle rather than release wash water, and will be equipped with a sump to contain sludge, with a skimmer to collect oil and grease so that these wastes are isolated from the mine drainage system.

The fueling station will employ containment and safety features consistent with spill containment and countermeasure (SPCC) requirements.

An explosive magazine will be located at the north end of Tract 2, remote from offices and other facilities, consistent with requirements of the Mine Safety and Health Administration (MSHA).

The tentative location may require adjustment depending on the types and amounts of explosives stored.

Water supply will utilize a deep well or wells for domestic water; engineering studies will be required to determine amounts required and the appropriate source. To the extent possible, water contained in sediment ponds will be used for dust control on haul roads. Water pumped from the clinker aquifer is an alternate water source for dust control and also for fire suppression water, which must be stored and available for automated fire suppression.

Similarly, facility heating and cooling will require an engineering study to determine the most cost effective option, given remoteness of the site. Some combination of electricity and natural gas or propane is the most likely option.

3.0 Removal and Reclamation of Facilities

At the conclusion of mining, facilities not needed and approved by MDEQ to support the post-mining land use will be removed and the site reclaimed. Components that can be re-used will be salvaged and moved from the site. Remaining materials will be sold as scrap or moved from the site for disposal. Inert materials such as concrete will be buried at locations to be proposed for approval at that time. After demolition and removal of facilities, areas affected will be reclaimed by grading to approximate original contour, soil placement and revegetation to support the post-mining land use.

4.0 ARM 17.24.609 Other Support Facilities

(1) Support facilities, including temporary and mobile facilities, required for, or used incidentally to, the operation of the mine including, but not limited to, mine buildings, rock crushers, coal loading facilities, coal storage facilities, equipment storage facilities, septic systems, sewage lagoons, fuel storage and distribution facilities, sheds, shops, other buildings, and environmental monitoring sites will be designed, constructed or reconstructed, and located to prevent or control erosion and siltation, water pollution, and damage to public or private property. Support facilities will be designed, constructed or reconstructed, maintained, and used in a manner which prevents, to the extent possible using the BTCA:

- (a) damage to fish, wildlife, and related environmental values; and

(b) additional contributions of suspended solids to stream-flow or runoff outside the permit area. Any such contributions will not be in excess of limitations of state or federal law.

(2) Mining operations will be conducted in a manner that minimizes damage, destruction, and disruption of services provided by oil, gas and water wells; oil, gas, and coal-slurry pipelines; railroads; electric and telephone lines; and water and sewage lines which pass over, under, or through the permit area, unless otherwise approved by the owner of those facilities and the department. Such facilities are shown on Map 5 – Surface Features.

(3) No support facility will be constructed in a manner or located other than as indicated in the approved permit application or site approved by the department. To the extent required by this rule, final designs for facilities will be submitted to the department for approval prior to construction.