

## **OTTER CREEK MINE**

### **17.24.305 MAPS**

#### **17.24.305(1)**

Maps include the following information:

##### **17.24.305(1)(a)**

The owners of record of the surface of the land to be affected by the permit and the owners of record of all surface area within one-half mile of any part of the affected area are shown on Map 2 – Surface Ownership. See also Exhibit 303A – Surface Ownership for detailed surface ownership information.

##### **17.24.305(1)(b)**

Owners of record of all subsurface minerals in the land to be affected are shown on Map 3 – Mineral Ownership. See also Exhibit 303B – Mineral Ownership for detailed mineral ownership information.

##### **17.24.305(1)(c)**

Boundaries of land within the proposed permit area upon which the applicant has the legal right to enter and begin mining activities are shown on Map 4 – Coal and Surface Mining Rights.

##### **17.24.305(1)(d)**

Boundaries of all areas proposed to be affected over the estimated total life of the proposed mining operations are shown on Map 1 – Mine Sequence. Included are descriptions of size, sequence, and timing of the mining of subareas for which it is anticipated that additional permits will be sought. Coal limits including the crop line and burn line are shown.

##### **17.24.305(1)(e)**

Names and locations of roads, buildings, facilities, cemeteries, and utility lines and corridors on the permit area and within 1,000 feet of such area are shown on Map 5 – Surface Features. There are no oil and gas wells, pipelines or strip or underground mines on or in the vicinity of the

permit area. Willow Crossing Cemetery is shown on the map but is not within 1000 feet of the permit area or the Otter Creek coal tracts.

**17.24.305(1)(f)**

Reference areas for determining the success of revegetation are not proposed.

**17.24.305(1)(g)**

There are no known surface water supply intakes for current users of surface water on or in the vicinity of the permit area. Otter Creek and Threemile Creek are the surface waters which will receive discharges from affected areas in the proposed mine plan area; these are shown on Map 5 – Surface Features.

**17.24.305(1)(h)**

There are no public parks in or adjacent to the area of the Otter Creek coal tracts; the Custer National Forest abuts Otter Creek Tracts (Map 2 – Surface Ownership). Locations of cultural or historical resources listed or eligible for listing in the national register of historic places and known archeological sites within the mine plan or adjacent areas are shown on Map 6 – Cultural Sites (Confidential).

**17.24.305(1)(i)**

There is no land within the proposed mine plan area and adjacent area that is within the boundaries of any units of the national system of trails or the wild and scenic rivers system, including study rivers designated under section (5)(a) of the Wild and Scenic Rivers Act.

**17.24.305(1)(j)**

Lands proposed to be affected throughout the operation are shown on Map 1 – Mine Sequence; Map 8 – Mine Plan shows lands to be affected within the application area. Pre-mine topography is shown on Map 7 – Pre-Mine Topography. Any change in a facility or feature to be caused by the proposed operations is shown on Map 8 – Mine Plan;

**17.24.305(1)(k)**

The area of land to be affected within the proposed mine plan area, according to the sequence of mining and reclamation, is shown on Map 1 – Mine Sequence.

**17.24.305(1)(l)**

Each area of land for which a performance bond or other equivalent guarantee will be posted is shown on Map 8 – Mine Plan.

**17.24.305(1)(m)**

Each mineral storage, cleaning or loading area and each soil, spoil, coal waste, garbage or other debris storage area is shown on Map 8 – Mine Plan.

**17.24.305(1)(n)**

Elevations and locations of monitoring stations used to gather data for water quality and quantity, fish and wildlife, and air quality, if required, in preparation of the application are shown on Map 10 – Environmental Monitoring Stations.

**17.24.305(1)(o)**

Each water diversion, collection, conveyance, treatment, storage, and discharge facility to be used is shown on Map 11 – Operational Drainage Control.

**17.24.305(1)(p)**

Each air pollution collection and control facility is noted on Map 9 – Mine Facilities.

**17.24.305(1)(q)**

Each source of waste and each waste disposal facility relating to processing or pollution control is shown on Map 9 – Mine Facilities.

**17.24.305(1)(r)**

Location of proposed postmine revegetation communities and proposed fish, wildlife, and related environmental enhancement features are shown on Map 13 – Revegetation Plan.

**17.24.305(1)(s)**

Each explosives storage and handling facility is shown on Map 9 – Mine Facilities.

**17.24.305(1)(t)**

The location of each sedimentation pond is shown on Map 8 – Mine Plan and on Map 11 – Operational Drainage Control. Permanent water impoundments are shown on Map 14- Post-Mining Drainage Control Plan. There will be no need for permanent disposal of excess spoil. Temporary spoil storage is shown on Map 8 – Mine Plan.

**17.24.305(1)(u)**

Each map shows the date on which it was prepared and the north point; a legend indicating the items shown on the map, the scale, and the contour interval; the township, range, and section numbers.

**17.24.305(1)(v)**

Each map includes grid coordinates based upon the North American Datum (NAD) 83.

**17.24.305(1)(w)**

The final surface and underground water drainage plan on and away from the area of land affected is shown on Map 14 – Post-Mining Drainage Control Plan. This plan with supporting narrative indicates the direction and volume of flow of water, constructed drainways, natural waterways used for drainage, and the streams or tributaries receiving the discharge.

**17.24.305(1)(x)**

Locations of test boring holes are shown on Map 15 – Drill Hole Locations.

**17.24.305(1)(y)**

Surface location lines of geologic cross sections are shown on Map 16 – Geologic Cross Sections.

**17.24.305(1)(z)**

The location and extent of subsurface water is addressed in Baseline Report 304E - Hydrology, which includes potentiometric maps depicting ground water flow and modeling of ground water flux. Also included are maps showing names and locations of surface water bodies, including springs, constructed or natural drains, and irrigation ditches, within the proposed mine plan and adjacent areas. See also Baseline Report 325A - Alluvial Valley Floor Determination.

**17.24.305(2)**

Maps are prepared in accordance with the following procedures:

**17.24.305(2)(a)**

Each map containing information pursuant to (1) is certified as follows: "I, the undersigned, hereby certify that this map is correct and shows to the best of my knowledge and belief all the information required by the mining laws of this state." The certification is submitted as a document separate from the map(s) in affidavit form.

**17.24.305(2)(b)**

Maps, plans, and cross-sections submitted under (1)(d), (e), (j), (k), (l), (m), (o), (p), (q), (s), (t), (x), and (z) have been prepared by, or under the direction of, and certified by a qualified licensed professional engineer, with assistance from experts in related fields.

(i) All maps noted above have been prepared by, or under the direction of, and certified by a qualified licensed professional engineer, so this provision is not applicable.

(ii) Maps, plans, and cross-sections for sedimentation ponds and spoil disposal facilities have been a qualified licensed professional engineer.

**17.24.305(2)(c)**

All detail on maps is clearly legible.

**17.24.305(3)**

Maps other than those outlined in (1) and (2) necessary to meet the requirements of this rule or other rules adopted pursuant to the Act are certified as specified in (2)(a).