

## **OTTER CREEK MINE**

### **17.24.304 BASELINE INFORMATION: ENVIRONMENTAL RESOURCES**

#### **17.24.304(1)**

The following environmental resources information is included as part of this application for a strip or underground mining permit:

##### **17.24.304(1)(a)**

The size, sequence, and timing of the subareas of the mine plan area for which it is anticipated that individual permits for mining will be requested over the estimated total life of the proposed mining activities are shown on Map 1 – Mine Sequence. The initial application is within Otter Creek Tract 2; future permits will be requested on Tracts 1 and 3.

##### **17.24.304(1)(b)**

Baseline Report 304A1-4 – Cultural Resources consists of Class 3 cultural resource surveys which in combination comprise a listing with locations and descriptions of all archaeological, historical, ethnological and cultural resources and values of the proposed mine plan and adjacent area. Identified cultural resources are shown on Map 6 – Cultural Sites. Baseline Report 304B – Cultural Site Testing Report will identify sites listed on, eligible for, or potentially eligible for the national register of historic places. Published research or other information is referenced and copies of referenced reports will be made available to the department upon request.

##### **17.24.304(1)(c)**

The geologic and scenic character of Otter Creek Tract 2 is typical of many areas of eastern Montana. The prominent feature is Otter Creek, which is a northward flowing perennial tributary of the Tongue River, and its flood plain. On the east and west flanks of the flood plain topography trends gently upward through areas of rolling topography to steep breaks including badlands topography and cliff features. In many cases ephemeral tributary drainages are deeply incised and eroded. It is in the intermediate elevation rolling topography zone that surface mining conditions are favorable. Vegetation is dominated by grassland and shrub-grassland with ponderosa pine dominating at higher elevations. Baseline Report 304C – Geologic, Scenic and Topographic Features is a comprehensive listing, including locations and descriptions, of topographic and scenic features in Tract 2.

**17.24.304(1)(d)**

There is no evidence that the permit area possesses special, exceptional, critical, or unique characteristics as defined in 82-4-227, MCA, nor does the surrounding land possess special, exceptional, critical or unique characteristics that would be adversely affected by mining. Please refer to Baseline Report 304D – 82-4-227(2) MCA Evaluation.

**17.24.304(1)(e)**

All hydrologic and geologic data necessary to evaluate baseline conditions, to evaluate the probable hydrologic consequences and cumulative hydrologic impacts of mining, pursuant to ARM 17.24.314(3) and (5) and 82-4-222, MCA, and to develop a plan to monitor water quality and quantity to address the requirements of ARM 17.24.314, is contained in Baseline Report 304E – Tracts 1, 2, and 3 Baseline Water Resources Data Report.

**17.24.304(1)(f)**

Baseline Report 304E – Tracts 1, 2, and 3 Baseline Water Resources Data Report includes a narrative and graphic account of ground and surface water hydrology including the information required by this section.

**17.24.304(1)(g)**

Detailed descriptions of all overburden and mineral materials (all materials other than soil) that will be handled during mining or backfilling operations are included.

Please refer to Baseline Reports 304F – Lithologic Logs, 304G – Geophysical Logs, and 304H – Overburden Analysis and Suitability. Drill hole locations are shown on Map 15 – Drill Hole Locations.

**17.24.304(1)(h)**

Climatological information is presented in Baseline Report 304I – Climate and Meteorology.

**17.24.304(1)(i)**

Vegetation surveys and related information required by this section is submitted as Baseline Report 304J - Vegetation. A map delineating plant community types is included.

**17.24.304(1)(j)**

Baseline Report 304K – Fish and Wildlife Resources of the Otter Creek Mine Area 2010-2011 addresses the requirements of this subsection. A map depicting wildlife habitat types in the entire wildlife survey area is included.

**17.24.304(1)(k)**

Baseline Report 304L – Soils addresses the requirements of this subsection. A soils map is included.

**17.24.304(1)(l)**

The condition, capability, productivity, and history of use of the land and vegetation within the proposed permit area is addressed in Baseline Report 304M – Land Use. A land use map is included which depicts uses of the land at the time of filing of the application.