OTTER CREEK MINE
EXHIBIT 313E – SOIL HANDLING PLAN

1.0 Introduction

Baseline Report 304L – Soils Report, describes detailed soil survey information for the Study Area which includes the Tract 2 mine area and the mine facilities sites. The report includes a soils map, mapping unit descriptions, analytical data by soil horizon, factors limiting suitability for use in reclamation, and recommended salvage depths for topsoil and subsoil horizons. Plate 1 is a Soil Salvage Map showing recommended salvage depths and soil volumes in the area to be affected by mining. The total soil volume available is 19 million bank cubic yards, or sufficient volume to replace an average of 31 inches of soil over the approximately 4602 acres to be affected by mining (excluding soil storage), assuming a bulking or swell factor of zero percent. Estimates of soil salvage for each disturbance category and soil map unit are presented in Table 1. Actual topsoil salvage and replacement depths will vary according to site topography and the type of reclamation prescribed for any given area and soil depths will be compared to the baseline model to monitor soil recovery trends.

Topsoil (1st Lift) in most areas will be salvaged to a depth of 12 inches, except for badland/rock outcrops and disturbed land in which soils will not be salvaged due to poor soil quality and steep slopes. Shallow soil areas such as ridges, shoulders and slopes are common, particularly in the northern portion of the mine plan area. Salvage in such areas will be discretionary depending on the presence of usable soil and slopes where salvage equipment can operate safely. All usable topsoil that can be collected safely will be salvaged. Subsoil (2nd Lift) salvage depths range from 0 inches on slopes and ridges to 36 inches on swales and terraces. Topsoil will not be salvaged within designated topsoil storage areas and subsoil will not be salvaged within designated subsoil storage areas.

Agricultural soils salvaged from the access road and conveyor corridors across the Otter Creek floodplain and terraces will be stored separately for redistribution at the conclusion of mining and final mine closure.

As noted in Baseline Report 304H – Overburden Analysis, and Exhibit 313C – Backfilling and Grading, graded spoils are expected to exhibit moderately sodic and/or saline properties in some areas to be identified through backfill testing (Exhibit 313F – Soil Testing Plan). The available combined topsoil and subsoil depth will be adequate to mitigate these overburden properties. If soil availability is limited by the salvage limitations noted above, supplemental material from spoil storage will be utilized. Stored spoils will originate from the box cut in the southern portion of the mine plan (Exhibit 313C – Backfilling and Grading) represented by overburden drill holes 1101, 1102, 1117, 1118, 1119, 1120 and 1121, which include very little sodic material (Baseline Report 304H – Overburden Analysis).

2.0 ARM 17.24.701 REMOVAL OF SOIL

(1) Prior to any surface disturbance by the mining operation, and after the removal of vegetation that would interfere with soil removal and use, all soil suitable for reclamation use will be removed.

(2) Otter Creek Coal, LLC (OCC) will use a multiple-lift soil handling method consisting of the separate handling of topsoil (A, E, and possibly upper B or C horizons) and subsoil (underlying B and C horizons) during salvage, stockpiling, and redistribution. Shallow soils where the total recommended salvage thickness is one foot in depth will be salvaged in a single lift.

(3) Undisturbed soils will be protected, to the extent possible, from contamination and degradation through soil salvage operations conducted in a manner and at a time that minimizes erosion, contamination, degradation, compaction, and deterioration of the biological properties of the soil.

(4) Soil removal is not required for minor disturbances at small sites such as power poles, signs, or fences or where operations will not destroy vegetation and cause erosion.

3.0 ARM 17.24.702 REDISTRIBUTION AND STOCKPILING OF SOIL

(1) After salvage, soil will be immediately redistributed according to the requirements of (5) and (6) on areas graded to the approved postmining topography.

(2) Salvaged soil will be stockpiled if graded areas are not immediately available for redistribution, such as during initial pit development. Soil stockpiles are shown on Map 8 – Mine

Plan, and are located where they will not be disturbed by mining operations and will mitigate losses to wind or water erosion. Compaction, contamination, and degradation of stockpiles will be minimized through stockpile segregation and minimal handling. Stockpiled soil will not be rehandled until replaced on graded areas, unless authorized by the department.

(3)(a) Inactive soil stockpiles will be seeded or planted with an effective cover of non-noxious, quick-growing, annual and/or perennial plants during the first normal period favorable for planting. Please refer to Exhibit 313G – Revegetation Plan.

(b) Active stockpiles or stockpiles that will be used within one year will not be seeded. However, protective measures such as fencing, wind rowing, water applications and other similar techniques will be utilized as necessary to minimize erosion.

(4) Prior to redistribution of soil or soil substitutes, graded areas will be:

(a) Sampled and analyzed to determine the physicochemical nature of the surficial spoil material; please refer to Exhibit 313F – Soil Testing Plan;

(b) Scarified on the contour to a minimum 12-inch depth, unless otherwise approved by the department.

(5) OCC will, during and after redistribution, prevent, to the extent possible, spoil and soil compaction, protect against soil erosion, contamination, degradation, and deterioration of the biological properties of the soil.

(6) Soil will be redistributed in a manner that achieves thicknesses consistent with soil resource availability and appropriate for the postmining vegetation, land uses, contours, and surface water drainage systems.

(7) Redistributed soil will be reconditioned by subsoiling or other appropriate methods approved by the department. Soil reconditioning will be done on the contour, whenever possible consistent with safety requirements.

4.0 ARM 17.24.703 SUBSTITUTION OF OTHER MATERIALS FOR SOIL

(1) OCC does not at this time propose utilization of soil substitute material. As noted above, spoil placed into storage from the south box cut area is expected to be suitable for use as supplemental fill prior to soil replacement if this proves to be necessary. Any proposal to utilize this material as a soil substitute will follow the requirements of this subsection:

(a) OCC will submit a demonstration that the stored spoil material is at least as capable as the soil of supporting the approved vegetation and postmining land use.

(b) The medium will be the best available in the permit area to support revegetation.

(2) Any soil substitutes will be handled consistent with ARM 17.24.701 and 17.24.702.