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~~At the end of the life of mine~~During portal reclamation, the ancillary road into the breakout site will be reopened. The portals will be sealed as outlined in Section 4.9. The highwall at the breakout area will be eliminated by front-end, backhoe, or other types of tracked or rubber tired equipment. If additional fill material is needed to return the area to approximate original contour, the remainder of the small knob at the mouth of the canyon may be used. However, the permittee may elect to use waste rock from the mine's temporary waste rock storage site instead of the small knoll. The use of waste rock will help minimize disturbance in an area where the vegetation has recovered well since original portal construction. The waste rock will be buried by a minimum of five feet of subsoil and topsoil (The initial five feet of cover should allow for deep gouging of the topsoil surface while maintaining at least four feet of cover over the waste rock.) The waste rock will be analyzed in accordance with the parameters presented in Section 4.4.5 of this chapter even though it will be covered by four or more feet of soil. The use of waste rock is necessary since at least 1,000 or more cubic yards of coal and coaly soil was reportedly removed from the site during portal construction. It is anticipated, based on an August 2003 survey of the portal area used to create the topography and cross-sections presented in Drawing 4.6.5-1, that 1,300 or more cubic yards of waste rock could be used to reclaim the site and return it to AOC.

~~The~~ Subsoil from the storage areas will be uniformly placed in the breakout area and then ~~the~~ topsoil will be uniformly spread over the area. The ancillary road up the side canyon to the breakout area and the temporary road used for soil storage will then be returned to approximate original contour of surrounding terrain. The area where the knob was, if used for reclamation, will also be contoured to blend in with the surrounding terrain.

The soil will be spread in a manner to provide a roughened surface so that seed, fertilizer and mulch can remain during germination and initial growth of the seedlings. The permittee intends to

and initial growth of the seedlings. The permittee intends to roughen the reclaimed surface using deep gouging or pock-mocking techniques. Raking surfaces prior to planting may also be needed to provide the necessary roughened surface in areas that cannot be deep gouged.

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disturbance will be reseeded and have silt fences and/or straw bales to treat the runoff from the disturbance until the area is released.

4.6.5 South Fork Breakout

Before any top soil was removed, all woody vegetation was removed from the project area. Soils are basically a sandy loam mixture and have been classified by the S.C.S. as Uinta Family loam/tozc Family fine Sandy loam. Core sampling in the area shows that the soils vary in depth from 24 - 36+" in depth.

After the vegetation had been removed, the A & B horizons of soil were removed using a track hoe. The track hoe stacked the soil where a front-end loader picked it up and transported it to the storage area on the abandoned temporary Forest Service road and on the small opening at the mouth of the canyon where the knob was removed. The front-end loader spread the soil in approximately two foot lifts. By handling the soil in this manner, it will not be compacted in the storage area and the roots of the revegetation plants will penetrate the entire depth of the soil. This will allow the soil to maintain itself as viable top soil to be used during final reclamation. It is estimated that approximately 2,990 cubic yards of topsoil was removed and stored.

As subsoils were encountered, they were used to bring the ancillary access road up to grade. Subsoil not used as road was also stored on the small opening at the mouth of the canyon where the knob was removed. It is estimated that approximately 2,840 cubic yards of subsoil was removed. Approximately 1,820 cubic yards of the subsoil were used in the road fill and the remaining 1,020 cubic yards were stored for final reclamation.

As the coal in the coal seam was encountered, it was hauled out so as to eliminate the possibility of spontaneous combustion occurring.

Once the construction was complete, all of the disturbed areas were seeded and all the roads that are on National Forest Lands and the disturbed areas were water barred and seeded with the mixture shown on Table 4.6-1. A combination of silt fences and strawbales were used to treat surface run-off from the disturbed area of the ancillary road, the breakout pad and the topsoil-subsoil storage areas until adequate vegetation is established. The silt fences and strawbales were located as needed between the disturbed and undisturbed areas to treat run-off from the disturbed area.

During portal reclamation, the ancillary road into the breakout site will be reopened. The portals will be sealed as outlined in Section 4.9. The highwall at the breakout area will be eliminated by front-end, backhoe, or other types of tracked or rubber tired equipment. If additional fill material is needed to return the area to approximate original contour, the remainder of the small knob at the mouth of the canyon may be used. However, the permittee may elect to use waste rock from the mine's temporary waste rock storage site instead of the small knoll. The use of waste rock will help minimize disturbance in an area where the vegetation has recovered well since original portal construction. The waste rock will be buried by a minimum of five feet of subsoil and topsoil (The initial five feet of cover should allow for deep gouging of the topsoil surface while maintaining at least four feet of cover over the waste rock.) The waste rock will be analyzed in accordance with the parameters presented in Section 4.4.5 of this chapter even though it will be covered by four or more feet of soil. The use of waste rock is necessary since at least 1,000 or more cubic yards of coal and coaly soil was reportedly removed from the site during portal construction. It is anticipated, based on an August 2003 survey of the portal area used to create the topography and cross-sections presented in Drawing 4.6.5-1, that 1,300 or more cubic yards of waste rock could be used to reclaim the site and return it to AOC.

Subsoil from the storage areas will be uniformly placed in the breakout area and then topsoil will be uniformly spread over the area. The ancillary road up the side canyon to the breakout area and the temporary road used for soil storage will then be returned to approximate original contour of surrounding terrain. The area where the knob was, if used for reclamation, will also be contoured to blend in with the surrounding terrain.

The soil will be spread in a manner to provide a roughened surface so that seed, fertilizer and mulch can remain during germination and initial growth of the seedlings. The permittee intends to roughen the reclaimed surface using deep gouging or pock-mocking techniques. Raking surfaces prior to planting may also be needed to provide the necessary roughened surface in areas that cannot be deep gouged.

Map(s) is kept with this application located in the Public Information Center of our Salt Lake City office.

RECLAMATION CROSS-SECTIONS SOUTH FORK PORTALS 8/28/2003