

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

August 17, 2010

TO: File

THRU: Priscilla Burton, Environmental Scientist and Team Lead

FROM: James Owen, Reclamation Engineer *jeo*

RE: Winter Quarters Access Roads, Canyon Fuel Company, LLC, Skyline Mine, C/007/005, Task #3597

SUMMARY:

On July 27, 2010, the Division of Oil Gas & Mining received an application to amend the Skyline Mine MRP to improve & upgrade an existing road located in Winter Quarters Canyon. The road is necessary to access Skyline's Winter Quarters Ventilation Facility (WQVF), and will be used as an ancillary road during the WQVF construction period.

Included within the submittal are the proposed modifications to the MRP, numerous modified plates, an engineering report detailing the road upgrades, and a cultural resource report identifying no adverse impacts with the road improvements.

This technical memorandum will address the adequacy of the application as it relates to the engineering (R645-301-500) requirements of the Utah Coal Mining Rules.

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TECHNICAL ANALYSIS:

OPERATION PLAN

ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES

Regulatory Reference: 30 CFR Sec. 784.24, 817.150, 817.151; R645-301-521, -301-527, -301-534, -301-732.

Analysis:

The applicant states that an existing road located in Winter Quarters Canyon will be improved/ upgraded to be used as an ancillary road during the Winter Quarters Ventilation Facility (WQVF) construction period. The road encompasses approximately 4.90 acres of previously disturbed ground. The road will be improved with the addition of road base, gravel, and drainage from the road. The footprint, location, or extents of the road will not be modified, and historic features will be avoided.

Initial construction will include upgrades to the existing Winter Quarters Canyon Road (Provided with the submittal on plates 3.2.11-B-1 and 3.2.11-B-2), then construction access from the existing road to access the WQVF pad site to create a pad for an electrical substation to provide power for further site construction.

According to information provided within the cross section on plate 3.2.11-B-1, the road will typically have a width of 14-16' at its crest and 17.5-19.5' at its base. Out-slopes on both sides of the road are designed at 2:1. Course base (1,300CY) at ¾" minus will be compacted to 95% of max dry density, as per ASTM D-698, to achieve a thickness of 4". Below, the course base, pit run (2,500CY) at 3" minus will be compacted to 95% of max dry density, as per ASTM D-698, to achieve a thickness of 6".

Findings:

Contents and information provided are sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules.

RECLAMATION PLAN

ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES

Regulatory Reference: 30 CFR Sec. 701.5, 784.24, 817.150, 817.151; R645-100-200, -301-513, -301-521, -301-527, -301-534, -301-537, -301-732.

Analysis:

The applicant states that improvements that are made to the existing Winter Quarters Access Road while the WQVF is operational will remain intact for the landowner as outlined in the easement of the lease. The road will not be reclaimed and will be left for post-mining land use at the landowner's request.

Findings:

Contents and information provided are sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules.

MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

Analysis:

The submittal included associated maps, plans, and cross sections of operational and reclamation details associated with the road upgrade. The plates include details of land ownership, coal ownership, mine permit area, geology of permit area, seam isopachs, overburden, abandoned/adjacent workings, surface water rights, ground water rights, hydrologic monitoring stations, subsidence monitoring stations, vegetation types, soil types, macro invertebrate sample site locations, land use, mine plans, projected mine plans, access road profiles, access road plan/cross-sections, and pre subsidence surveys.

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The majority of the plate modifications address adding the Winter Quarters access road to the permit area. Only plates 3.2.11-B-1 and 3.2.11-B-2 specifically address the upgrades to the existing road. A registered professional engineer certifies the maps, plans and cross sections.

Findings:

Thee contents and information provided are sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules.

RECOMMENDATIONS:

The application is recommended for approval.