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State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

007

Michael O. Leavitt
Governor
Kathleen Clarke
Executive Director
Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

September 29, 2000

TO: Internal File

THRU: Wayne H. Western, Reclamation Specialist III *WHW*

RE: Review of Midterm Response, Canyon Fuel Company, LLC, Skyline Mine ACT/007/005-MT99-2 *Internal File*

SUMMARY:

On July 25, 2000 the Division received the permittee's second response to the midterm review. During the midterm the Division found that the highwall elimination plan and the backfilling and grading plan were deficient. The Division reviewed the response and found that the highwall elimination plan was adequate but the backfilling and grading plan needed to be revised to show the location of concrete structures that would be left in site.

RECLAMATION PLAN

APPROXIMATE ORIGINAL CONTOUR RESTORATION

Regulatory Reference: 30 CFR Sec. 784.15, 785.16, 817.102, 817.107, 817.133; R645-301-234, -301-270, -301-271, -301-412, -301-413, -301-512, -301-531, -301-533, -301-553, -301-536, -301-542, -301-731, -301-732, -301-733, -301-764.

Analysis:

The permittee proposes to reclaim the mine site to meet the approximate original contours requirements; however, the site will not meet the original surface configuration. The reasons the site cannot be returned to the premining surface configuration are some premining slopes had safety factors less than 1.3 and the site will have excess fill because State Road 264 and will not be reclaimed. Some slope must have gentler slopes than originally existed. Most reclaimed slopes will have angles of 2h:1v or gentler.

The reclamation plan also calls for reclaiming all highwalls and cut slopes. Drawing No. 4.4.2-1BA and drawing No. 4.4.2-2BA show the proposed reclaimed cross sections. The highwalls are shown

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stations 3+00 to 10+00 and between stations 18+00 to 19+00. The steepest reclaimed highwalls will have slopes of 30° (1.7H:1V). The slopes will be feathered into the existing topography to prevent slope jumps or highwall remnants from existing.

The cross sections show that all highwalls will be eliminated. The reclaimed slopes will be feathered into the surrounding topography thus preventing any steep slopes (cut slopes) from existing after final reclamation. The Division reviewed the reclamation plan and determined that it complies with the minimum regulatory requirements for AOC. The permittee proposes to reclaim the mine site to meet the approximate original contours requirements; however, the site will not meet the original surface configuration. The reasons the site cannot be returned to the premining surface configuration are some premining slopes had safety factors less than 1.3 and the site will have excess fill because State Road 264 and will not be reclaimed. Some slope must have gentler slopes than originally existed.

Findings:

The permittee met the minimum regulatory requirements.

BACKFILLING AND GRADING

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, -302-232, -302-233.

Analysis:

The Division reviewed the highwall elimination plan, contained in the midterm response, submitted on July 25, 2000. The proposed backfilling and grading plan will eliminate all highwalls and cut slopes. See drawings 4.4.2-1B and 4.4.2-1BA for details. In the text the permittee commits in Section 4.4.2 to eliminate all highwalls and cut slopes.

The reclaimed slopes, shown on drawings 4.4.2-1A and 4.4.2.1B, have straight slopes with a 2h:1v angle. Long straight slopes will erode more quickly than concave slopes or slopes with breaks. **The Division recommends that concave slopes or slopes with breaks be constructed.** However, the Division will not require the permittee to design concave slopes or slopes with breaks at this time. The permittee has the responsibility to show that all reclaimed slopes are stable (slopes that are not eroding or contributing to increased sediment loading) before Phase II bond release can be granted. If the original design cause erosion or increased sediment loading the Division will require the permittee to take corrective action that may include regrading the slopes.

The Divisions review of the slope stability analysis for the reclaimed slopes. All slopes will have a safety factor of 1.3 or greater.

Findings:

The permittee met the minimum requirements of this section.

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:

Final Surface Configuration Maps

The plan for highwall elimination is presented in Section 4.4.2 and on drawings 4.4.2-1B and 4.4.2.AA. The drawings adequately show the reclamation plan and how the highwalls and cut slopes will be eliminated.

Findings:

The permittee met the minimum requirements of this section.

RECOMMENDATIONS:

The Division should approve amendment submitted on July 25, 2000.