



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

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August 28, 2000

TO: Internal File
THRU: Paul Baker, Team Lead *PAB*
FROM: Wayne H. Western, Senior Reclamation Specialist *WHW*
RE: Phase I Bond Release- Hardscrabble Canyon, Castle Gate Holding Company, Castle Gate Mine, ACT/007/004-BR00B

SUMMARY:

On July 3, 2000, the Division received the permittee request to be granted Phase I bond release for the Hardscrabble Canyon area of the Castle Gate Mine. The Division reviewed the reclamation plan and field checked the as-built drawing. The Division found that the site met the minimum requirements for Phase I bond release. The Division should prepare for the final Phase I bond release inspection.

RECLAMATION PLAN

POSTMINING LAND USES

Regulatory Reference: 30 CFR Sec. 784.15, 784.200, 785.16, 817.133; R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

Analysis:

The main access road in Hardscrabble Canyon has been approved to be left as part of the postmining land use. The Division inspected the site on July 28, 2000 and found the road to be properly maintained.

TECHNICAL MEMO

The substation will be left in place until power from the site is no longer needed. The substation is not considered part of the postmining land use.

Findings:

The permittee met the minimum requirements of this section.

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:

On April 21, 2000, the Division field checked the certified as-built maps and cross sections for Hardscrabble Canyon. After the field inspection the Division compared the as-built maps and cross sections with the reclamation plan. The Division found the site conditions met the requirement of the coal rules and permit conditions. On May 11, 2000, the Division approved the as-built drawings for Hardscrabble Canyon and incorporated them into the MRP.

One issues that the Division looked at while reviewing the as-built drawings was compliance with the approximate original contour requirements. The Division found that the site met the AOC requirements because the reclaimed drainages complement the undisturbed drainages and the topography blends into the surround areas.

However, the site was not restored to the original surface configuration. Some premining slopes had safety factors of less than 1.3 so those slopes had to be reclaimed with gentler slopes that would meet the 1.3 safety factor requirements. A road was also left as part of the postmining land use.

On April 14, 1997, the Division made findings about the highwalls at Hardscrabble Canyon. The Division approved variances for the portal highwalls at the No. 3 and No. 4 mine and for the shaft highwall at the No. 5 mine. The Division inspected those areas and found that the backfilling and grading were done according to the approved reclamation plan. Therefore, the Division finds that all highwalls have been reclaimed according to standards for previously mined areas.

Findings:

The permittee met the minimum requirements of this section.

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:

General

On April 21, 2000, the Division field checked the certified as-built maps and cross sections for Hardscrabble Canyon. After the field inspection the Division compared the as-built maps and cross sections with the reclamation plan. The Division found the site conditions met the requirement of the coal rules and permit conditions. On May 11, 2000, the Division approved the as-built drawings for Hardscrabble Canyon and incorporated them into the MRP.

One issues that the Division looked at while reviewing the as-built drawings was compliance with the backfilling and grading requirements. The Division found that the site met all the backfilling and grading requirements because:

- The site meets the AOC requirements.
- All spoil piles have been reclaimed.
- All highwalls have been reclaimed to standards for previously mined areas.
- The slopes met or exceed a safety factor of 1.3 and are stable.
- No spoil piles are on the site.
- All coal mine waste has been properly disposed.
- All coal seams and acid and toxic forming materials have been covered.
- No terraces were constructed on the reclaimed slopes.
- The slopes minimize erosion.

Previously mined areas

The permittee reclaimed all highwalls to standards for preciously mined areas.

Findings:

The permittee met the minimum requirements of this section.

MINE OPENINGS

Regulatory Reference: 30 CFR Sec. 817.13, 817.14, 817.15; R645-301-513, -301-529, -301-551, -301-631, -301-748, -301-765, -301-748.

TECHNICAL MEMO

Analysis:

All mine opens have been sealed according to the requirement of the approved reclamation plan.

Findings:

The permittee met the minimum requirements of this section.

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:

Reclamation

All roads in the disturbed area have been reclaimed according to the approved reclamation plan except the main canyon road. That road is scheduled to be retained as part of the post mining land use plan.

Retention

The main canyon road will be retained as part of the postmining land use plan. The road is classified as a primary road and meet the design standards. The Division found the road to be in good repair when they visited the site on July 28, 2000.

Findings:

The permittee met the minimum requirements of this section.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

Analysis:

Discharges into an underground mine

No discharges into underground mines will occur on the site.

Gravity discharges

No gravity discharges will occur.

Siltation structures

All siltation structures have been removed. Sediment is controlled by vegetation.

Sedimentation ponds

All sediment ponds have been removed.

Other treatment facilities

All sediment is controlled by vegetation.

Exemptions for siltation structures

All sediment is controlled by vegetation.

Discharge structures

No discharge structures exist on the site.

Impoundments

No impoundments exist on the site.

Findings:

The permittee met the minimum requirements of this section.

CESSATION OF OPERATIONS

Regulatory Reference: 30 CFR Sec. 817.131, 817.132; R645-301-515, -301-541.

Analysis:

The site is in permanent cessation.

Findings:

The permittee met the minimum requirements of this section.

TECHNICAL MEMO

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:

Affected area boundary maps

Several maps show the affected surface boundaries for the Hardscrabble surface disturbance. Exhibit 3.3-19 shows the disturbed area boundaries.

Bonded area map

Several maps show the affected bond areas boundaries for the Hardscrabble area. Exhibit 3.3-19 shows the disturbed area boundaries that are considered to be the bond area.

Reclamation backfilling and grading maps

The backfilling and grading maps have been field check and incorporated into the MRP. The Division found the maps to be accurate and met all the requirements of this section.

Reclamation facilities maps

Exhibit 3.3-19 shows the existing substation and the main canyon road. The existing substation will remain until power from the site is no longer needed. The road will be retained as part of the postmining land use.

Final surface configuration maps

Exhibit 3.3-19, Exhibit 3.3-20A and Exhibit 3.3-20B show the final surface configuration. The maps have been field checked by the Division and incorporated into the MRP>

Reclamation surface and subsurface manmade features maps

Exhibit 3.3-19 shows the reclaimed surface manmade feature, which is the main canyon road. See the mine maps for subsurface features on the site.

Findings:

The permittee met the minimum requirements of this section.

BONDING AND INSURANCE REQUIREMENTS

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

Analysis:

Determination of bond amount

The current bond for the Hardscrabble Canyon is \$1,804,000 the permittee want \$783,000 released after Phase I bond release has been approved. The new bond would be \$722,000 (the Division round the bond to the nearest \$1,000). A 60% reduction maximum amount allowed under R645-301-880.310.

Phase I bond release is for backfilling, grading and topsoil placement. Those activities have been completed except for the reclamation of the electrical substation. Reclamation of that area will be completed when transmission from the site is no longer needed.

Phase II bond release is for successful revegetation. At the beginning of Phase II the permittee must have enough bond to ensure that the Division could revegetate the site. The Division calculated the revegetation costs to be \$121,000 in 2010 dollars. The new bond would be \$722,000 which would insure that the Division would have enough money to revegetate the site and reclaim the substation if the permittee forfeited the bond.

Findings:

The permittee met the minimum requirements of this section.

RECOMMENDATIONS:

The Division found the site meets the minimum requirements for Phase I bond release. The Division should proceed with the Phase I bond release inspection.