

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

May 11, 2004

TO: Internal File

THRU: Wayne Western, Environmental Scientist III, Engineer/Team Lead *WFW*

FROM: *BB* Priscilla Burton, Environmental Scientist III/Soils

RE: Phase I Bond Release Application, Plateau Mining Corporation, Star Point Mine, C/007/006, Task ID #1910

SUMMARY:

The Plateau Mining Corp (PMC) Phase I Bond Release application for 95.3 acres at the Star Point Mine was initially received November 10, 2003 and was followed by information dated April 7, 2004.

The application includes a notarized statement that the reclamation activities have been accomplished in accordance with the Act and according to the approved reclamation plan as required by R645-301-880.130. To support this statement, the application provides As-built Reclamation Topography and Treatment Maps (five sheets: Maps 542.200 a, a1, a2, a3, b, and c and Maps 542.200g & h), As Built Reclamation Cross-sections (six sheets: Maps 542.200d1, d2, d3, e1, e2, & f), and As-Built cut and fill balance for the site (Table 542.200a). (See the C1C2 forms for a complete list of the application contents.)

Bond Release Directive Tech-006 (dated September 5, 2000) and Utah Regulations R645-301-880.100 through 880.310 guided my review of this submittal. The Bond Release Directive requires that information showing that requirements for backfilling, regarding and drainage control measures be in either the bond release application package or the MRP.

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TECHNICAL ANALYSIS:

GENERAL CONTENTS

PERMIT APPLICATION FORMAT AND CONTENTS

Regulatory Reference: 30 CFR 777.11; R645-301-120.

Analysis:

The narrative on pages 500-79 and 500-80 became clear when the Division inserted the pages changes resulting from AM02D, Reduction in Permit Area, approved December 24, 2003.

Cross-section M-1 to M-1' on Map 542.200b has been replaced with cross-sections K-K' and L-L'.

PMC and the Division reviewed the acreage amounts in the bond release application and found that the number was incorrect. Instead of 95.3 acres the actual amount eligible for Phase I bond release is 93.77 acres, which is the disturbed area listed in the mining and reclamation plan (MRP.)

The disturbed area is noted as 93.77 acres on Table 321.100b (incorporated 12/04). Maps 542.200 a, b, c all indicate that the Phase I bond release is for 93.77 acres, rather than 95.3 noted in the notarized statement and in the public notice. The public notice indicates that the 95.3 acres includes the Corner Canyon and Mudwater Fan sites.

In the introduction section of the Star Point Mine Phase I bond release application received April 8, 2004, PMC states the reclaimed acreage as:

- Year 2000 Mudwater Canyon (1.10 acres) and Corner Canyon (0.44 acres).
- Year 2001 No. 1 Mine (35.0 acres) and Unit Train Loadout and Silo area (10.0 acres).
- Year 2002 Lion's Deck and Pond 1 (24.5 acres) and Overland Conveyor and Main Channel Areas (22.5 acres).
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The reclamation work completed in years 2000 through 2002 totals to 93.54 acres, very close to the 93.77 disturbed acreage figure. PMC reviewed the acreages and concluded that the acreages for Mudwater Canyon and Corner Canyon had been added twice.

Findings:

The application meets the minimum requirements for this section of the regulations.

RECLAMATION PLAN

REQUIREMENT TO RELEASE PERFORMANCE BOND

Regulatory Reference: 30 CFR Sec. 800.40; R645-301-880.

Analysis:

The public notice included as Exhibit 117.200a relates the following information: bond release is being sought for 95.3 acres of the Star Point Mine. Of the \$7,643,000.00 surety posted for the Star Point Mine, a release of \$4,585,800.00 or 60% is requested. (The bond amount was recently revised with Amendment AM0D-1.)

A total of 95.3 acres is requested for bond release in the notarized statement and in the public notice. The acreage is illustrated on the accompanying maps. Maps 542.200 a, b, c illustrate the 93.77 acres that comprise the Lions Deck, Mine #1, Unit Train Loadout, associated roads, ponds and facilities and the reconstructed channel of Serviceberry Creek. An additional 1.10 acres is shown on Map 542.200g (Mudwater Canyon) and 0.44 acres is shown on Map 542.200h (Corner Canyon.) The reclaimed land belongs to either Plateau Mining Corp. or the State of Utah (Surface Ownership Map 112.500a).

The application includes a notarized statement that the reclamation activities have been accomplished in accordance with the Act and according to the approved reclamation plan as required by R645-301-880.130. As-built Table 542.200a indicates that 419,764 yd³ of coal mine waste was cut from the main channel and lower facilities area and placed in the fill at the Lion's Deck or on the refuse pile. Final logistics of the waste placement is indicated on as-built Maps 542.200 a, b, and c, received April 8, 2004. These maps also indicate the dates that the work was accomplished.

Sidecast soils and pad soils were used in the reclamation of Mine #1. Soil was harvested from the Lion Deck out slope and the areas surrounding the Main Channel for use as in the rooting zone (footnote to Table 233.100) and from pond embankments (page 200-18). The Mudwater Canyon Fan Portal site was reclaimed in the fall 2000 with existing fill as growth media (page 200-22). The Corner Canyon Fan Portal site was reclaimed using the stockpiled topsoil and subsoil (page 200-22). Soils were salvaged and replaced to a depth of six inches during reclamation of the Unit Train Loadout conveyor (page 200-21 and 200-22). Characteristics of these soils are found in the MRP Tables 230.200a, c, d, e, & f and Exhibit 241a.

The Soil Redistribution Plan (MRP, Section 241, pp 200-21 through 200-25) indicates:

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- Four feet of cover was placed on top of acid/toxic material.
- All coal waste at the site was used as backfill.
- Seventeen inches of substitute soils was placed over all other areas.
- In-place fill materials were used as substitute soils.
- Re-exposed, buried topsoil was used wherever possible.

As laid out in Table 233.100 Reclamation Soil Balance for Coal Waste Cover (MRP, Section 233, page 200-19), UEI placed approximately 135,305 cy³ of material at the Lion Deck and the Main Channel in order to meet the four foot cover requirement.

The Lion Deck was backfilled with 113,532 cy³ of coal mine waste from the Main Channel and covered with four feet of material. Plate 542.200a indicates that all of the cover for the coal refuse placed on the Lion's Deck (69,202 cy³) came from the out slope of the Lion Deck pad. The "Introduction" to the Phase I bond release application verifies that Table 233.100 and page 200-24 of the MRP contain outdated information concerning the cover for the Lion Deck.

Coal mine waste was used as fill in the Main Channel side slopes (MRP, Section 240, page 200-25). This MRP information is confirmed by the as-built Map 542.200c. The coal mine waste was covered with four feet of soil. To accomplish reclamation of the Main Channel and Lower Facilities area, the volume of cover required was approximately 116,468 cy³. This material came from the adjacent operations pad areas, the borrow area was not disturbed.

The plan indicates that a fertilizer was applied (page 200-26), however the "Introduction" that accompanies the Phase I bond release application indicates that this did not occur.

The MRP, page 200-26 and 200-27, indicates that the regraded soils were ripped or otherwise scarified prior to topsoil placement. MRP, page 200-27 and page 500-78, reports that after topsoil placement 2 Tons per acre of hay and/or straw mulch was incorporated into the soil with plowing or gouging. Both pages add that another 1.5 to 2 Tons per acre of straw mulch were spread over the area after seeding and crimped in or sprayed on with a tackifier. Maps 542.200a, b, and c confirm this scarification and addition of hay and straw by outlining areas receiving the treatments. In addition, the "Introduction" accompanying the Phase I bond release application indicates that the straw was bound to the soil with an application of 500 lbs/acre of [wood fiber] hydromulch and tackifier.

Technical Directive 006 requires in item II B 3 that the postmining contour topographic maps show detail including important topographic features such as: dates of backfilling and grading activities, dates of topsoil replacement and topsoil replacement depths. The maps

received with this application indicate that the Lion Deck and Main Channel areas were deep gouged with hay and straw mulch in the fall of 2002. A note on the map details the dates of earlier reclamation. The maps outline burial sites for coal mine waste, and indicate a four-foot cover depth over coal mine waste.

The "Introduction" that accompanies the Phase I bond release application indicates that suitable growth media was identified and placed concurrently with the backfilling and grading to an "appropriate depth," which is further defined in the MRP as seventeen inches (MRP, Section 241, pp 200-21 through 200-25).

Findings:

The information provided in the MRP and the Phase I bond release application meets the requirements of Tech Directive 006 for soils and overburden chemical analyses results and the requirements of this section of the regulations.

RECOMMENDATIONS:

Phase I bond release is recommended for 93.77 acres. The reclamation work was completed in years 2000 through 2002 which totals to 93.77. The cover letter that accompanies the approval should note that the acreage listed in the public notice was 95.3 acres but later was found to be 93.77.