

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

December 31, 2003

TO: Internal File

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

FROM: Priscilla Burton, Environmental Scientist III/Soils

RE: Phase I Bond Release Application, Plateau Mining Corporation, Star Point Mine, C/007/006, Task ID #1768

SUMMARY:

Plateau Mining Corp submitted an application for Phase I Bond Release for 95.3 acres at the Star Point Mine. The date of receipt by the Salt lake Division offices was November 10, 2003.

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, 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 form 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.

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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 page 500-80 of the application begins with wording found in the middle of page 500-79 of the MRP.

The disturbed area is noted as 93.77 acres on Table 321.100b (revised 9/02). 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 difference is accounted for by the reclaimed acreage of Mudwater Canyon (1.10 acres) and Corner Canyon (0.44 acres). The acreage should be itemized as such in the narrative of the application.

Map 542.200b only partially identifies the cross-section M-1 to M-1', near swale 20a (top left corner), but this cross-section is not shown on Map 542.200a or in the cross-section detail sheets.

Findings:

The application does not meet the requirements for clear and concise information. Prior to approval the Permittee must provide the following in accordance with:

- R645-301-121.200**, (1) The narrative on revised page 500-80 of the application should pick up where the preceding page leaves off. (2) The basis of the 95.3 acre figure needs explaining in the application. i.e. Star Point Mine disturbed area is 93.77 acres, Corner Canyon disturbed area is 0.44 acres, Mudwater Canyon disturbed area is 1.10 acres (3) Map 542.200b only partially identifies the cross-section M-1 to M-1', near swale 20a (top left corner), but no further details of this cross section are provided.

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. However, pages 500-81 and 500-84 (submitted with the application) do not indicate the volume of coal mine waste backfilled against the cut slopes of the Lion's Deck. As-built Table 542.200a indicates that 419,764 cu yds of coal mine 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 should be indicated in the narrative. The application should 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 outslope 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 over acid/toxic material and all coal waste used as backfill;
- seventeen inches of substitute soils over all other areas;
- in-place fill materials used as substitute soils;
- re-exposed, buried topsoil used wherever possible.

As laid out in Table 233.100 Reclamation Soil Balance for Coal Waste Cover (MRP, Section 233, page 200-19), four feet of cover for the Lion's Deck and the Main Channel was approximated at 135,305 cu yds.

The Lion's Deck was backfilled with coal mine waste from the main channel, with four feet of cover. The Permittee has calculated in Table 233.100 that 18,837 cu yds of cover needed to be found for the Lion's Deck. This requirement is further explained on page 200-24 of the MRP that 55,499 cu yds of substitute topsoil will be required for cover, 36,662 cu yds of which will come from the outslope and 18,837 cu yds of which will be found from other areas within the permit area. The Permittee should clarify this statement on page 200-24 concerning the source of the cover over the coal mine waste at the Lion's Deck. i.e. The Division believes that cover material for the Lion's Deck came from the outslope of the road and the topsoil stockpile (formerly north of the test plots).

Coal waste was used as fill in the main channel side slopes (MRP, Section 240, page 200-25). The coal 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 cu yds. This material was found in adjacent operations pad areas, the borrow area was not disturbed.

The plan indicates that a fertilizer was applied (page 200-26), however the Division understands that this did not occur. The Permittee should revise the narrative on page 200-26 to reflect the fact that fertilizer was not applied during recent (2001 – 2002) reclamation.

The MRP page 200-26 and 200-27 indicates that the regraded soils were ripped or otherwise scarified prior to topsoil placement. The application should indicate whether this procedure was followed. MRP page 200-27 and page 500-78 report 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. The Division understands that the actual practice was to hydromulch using wood fiber mulch and a tackifier. The Permittee should accurately describe on pages 200-27 and 500-78 the techniques that were used with regard to incorporation of straw and surface mulch.

Technical Directive 006 requires in item II B 3 that the postmining contour topographic maps show detail including important topographic features, dates of backfilling and grading activities, dates of topsoil replacement and topsoil replacement depths. The Maps received with this application indicate that all areas were deep gouged with hay and straw mulch in the fall of 2002. The Division believes that both Mine #1 and the Unit Train Loadout areas were reclaimed in Fall 2001. The maps should outline burial sites for coal mine waste and delineate soil cover depths.

Findings:

The requirements of Tech Directive 006 for soils and overburden chemical analyses results (Items II B 4, IIB5, and IIB6) have been met with information in the MRP. Soil replacement depths (Items II B3d) were outlined in the MRP, but are required to be illustrated on the As-Built reclamation map along with the coal mine waste burial locations (topographic feature). In addition, the maps fail to accurately specify dates that the work was accomplished. The MRP should describe the sources of cover material for various sites; and accurately record the soil amendments and mulching conducted at the site.

The Permittee has not met the requirements for completing the backfilling and regarding in accordance with the approved reclamation plan. Prior to approval the Permittee must provide the following in accordance with:

R645-301-880.310, (1) Final logistics of the waste placement should be indicated in the narrative and on Maps 542.200a, b, c. (2) The Maps should indicate the dates that the work was accomplished for the Mine #1 and Unit Train Loadout locations. (3) Maps should indicate the topsoil replacement depths (4) The Permittee should clarify the statement in the MRP on page 200-24 concerning the source of the cover over the coal mine waste at the Lion's Deck. i.e. The Division believes that cover material for the Lion's Deck came from the outslope of the road and the topsoil stockpile (formerly north of the test plots). (5) The MRP page 200-26 and 200-27 indicates that the regraded soils were ripped or otherwise scarified prior to topsoil placement. The application should indicate whether this procedure was followed. (6) The Permittee should revise the narrative in the MRP on page 200-26 to reflect the fact that fertilizer was not applied during recent (2001 and 2002) reclamation. (7) The Permittee should describe in the MRP on pages 200-27 and 500-78 the techniques that were used with regard to incorporation of straw and surface mulch.

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RECOMMENDATIONS:

The Division should request that the Permittee update the MRP to accurately reflect the reclamation activity that occurred on site, prior to authorizing Phase 1 bond release.

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