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State of Utah

DEPARTMENT OF NATURAL RESOURCES

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Outgoing
C0070011

cc: Pete
B

December 29, 2008

Elliot Finley, Resident Agent
Hiawatha Coal Company
P.O. Box 1240
Huntington, Utah 84528

Subject: Phase I Bond Release, Task ID # 3035, Hiawatha Coal Company, Hiawatha Mine Complex, C/007/0011

Dear Mr. Finley:

The Division received your application for Phase I Bond release on August 19, 2008. There are three deficiencies which must be addressed prior to receiving a recommendation for approval:

R645-301-880.110, Appendix V-15 should be adjusted to reflect the completion of Slurry pond 5 and the separate reclamation of slurry pond 5A.

R645-301-121.200 and R645-301-880.110, HCCI committed to sampling and analysis of replaced topsoil (pg. 2-10). Division records dated March 17, 1997 indicate that soil analysis from topsoil on Slurry pond #5 were received. The analyses resulted in a fertilizer recommendation. The bond release application should confirm methods of fertilization of the reclaimed sites (slurry, refuse, and borrow areas).

- The application should provide information on further testing, if any, done since 1997, on the east half of slurry pond five.
- The MRP describes separate handling of the surface horizons from borrow area A for replacement onto the borrow areas after reclamation. However, a Division field report dated December 3, 1996 indicates that this procedure may have been abandoned. The bond release application should verify whether the lowest excavated horizon at borrow area A was ripped and seeded or whether the lowest horizon excavated was covered with stockpiled surface soil and then seeded.
- The bond release application should also settle questions of depth and volume cut from Borrow Area A as recorded in Table II-12 and on p. 2-10.

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R645-301-880.110, The bond release application should confirm type of roughening employed at slurry ponds and the borrow areas and detail type of mulch, rate of application and method of application on each site.

Also, the Division must receive concurrence from OSM that the requirements for Phase I have been met.

Please respond to these deficiencies by January 22, 2009 so that the DOGM may continue processing this Phase I Bond Release application.

If you have any questions, please call me at (801) 538-5262.

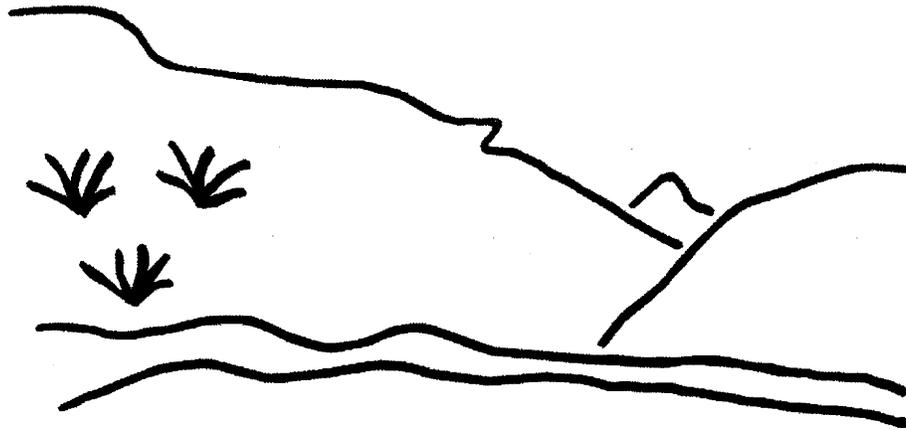
Sincerely,

A handwritten signature in black ink, appearing to read 'JDS', written over a horizontal line.

James D. Smith
Permit Supervisor

PH/ss
Enclosure
cc: Price Field Office
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State of Utah



Utah Oil Gas and Mining

Coal Regulatory Program

Hiawatha Mine Complex
Hiawatha Coal Company
Technical Analysis for Phase I Bond Release
December 10, 2008

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TECHNICAL ANALYSIS DESCRIPTION

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TECHNICAL ANALYSIS DESCRIPTION

The Division ensures that coal mining and reclamation operations in the State of Utah are consistent with the Coal Mining Reclamation Act of 1979 (Utah Code Annotated 40-10) and the Surface Mining Control and Reclamation Act of 1977 (Public Law 95-87). The Utah R645 Coal Mining Rules are the procedures to implement the Act. The Division reviews each permit or application for permit change, renewal, transfer, assignment, or sale of permit right for conformance to the R645-Coal Mining Rules. The Applicant/Permittee must comply with all the minimum regulatory requirements as established by the R645 Coal Mining Rules.

The regulatory requirements for obtaining a Utah Coal Mining Permit are included in the section headings of the Technical Analysis (TA) for reference. A complete and current copy of the coal rules can be found at <http://ogm.utah.gov>

The Division writes a TA as part of the review process. The TA is organized into section headings following the organization of the R645-Coal Mining Rules. The Division analyzes each section and writes findings to indicate whether or not the application is in compliance with the requirements of that section of the R645-Coal Mining Rules.

When review of an application results in findings of noncompliance with the R645-Coal Mining Rules, the Division discusses the deficiencies in the analysis sections and cites regulatory references for the deficiencies in the findings sections of the Draft TA. The regulatory references cited describe the minimum requirements for meeting the R645-Coal Mining Rules and obtaining a permit.

The Draft TA includes a summary list of deficiencies at the beginning of the document. The Applicant/Permittee will receive the summary list of deficiencies and a redline/strikeout version of the Draft TA at the completion of the review. As the Applicant/Permittee resolves the listed deficiencies, the Division modifies the Draft TA, until a Final TA with no deficiencies is written. Approval is based upon the Final TA. The Permittee will receive an electronic version of the Final TA.

The Final TA is the starting point for review of subsequent applications for permit change, renewal, transfer, assignment, or sale of permit right. The Division modifies the analysis and findings in the Final TA to reflect the changes in the application.

SUMMARY OF DEFICIENCIES

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SUMMARY OF DEFICIENCIES

This document presents the Division's technical review of the mining and reclamation plan (MRP), including all amendments currently under review for permit # C/007/011. The following summary lists all outstanding deficiencies identified by the Division.

Accordingly, the Division has identified the following issues:

R645-301-121.200 and R645-301-880.110, HCCI committed to sampling and analysis of replaced topsoil (pg. 2-10). Division records dated March 17, 1997 indicate that soil analysis from topsoil on Slurry pond #5 were received. The analyses resulted in a fertilizer recommendation. The bond release application should confirm methods of fertilization of the reclaimed sites (slurry, refuse, and borrow areas). •The application should provide information on further testing, if any, done since 1997, on the east half of slurry pond five. • The MRP describes separate handling of the surface horizons from borrow area A for replacement onto the borrow areas after reclamation. However, a Division field report dated December 3, 1996 indicates that this procedure may have been abandoned. The bond release application should verify whether the lowest excavated horizon at borrow area A was ripped and seeded or whether the lowest horizon excavated was covered with stockpiled surface soil and then seeded. • The bond release application should also settle questions of depth and volume cut from Borrow Area A as recorded in Table II-12 and on p. 2-10.

R645-301-880.110, Appendix V-15 should be adjusted to reflect the completion of Slurry pond 5 and the separate reclamation of slurry pond 5A.

R645-301-880.110, The bond release application should confirm type of roughening employed at slurry ponds and the borrow areas and detail type of mulch, rate of application and method application on each site.

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SUMMARY OF DEFICIENCIES

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IDENTIFICATION OF INTERESTS

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

Analysis:

The Mining and Reclamation Plan (MRP) Chapter I contains information on corporate ownership for the Hiawatha Mine. (Section R645-301-112). Hiawatha Coal Company, Inc. (HCCI) is the Permittee and operator of the site. Elliot Finley is the Resident Agent and President of HCCI.

The area under review for Phase I bond release, is located in Sec. 34 and 35 of T. 15 S., R. 8 E. In this Phase I bond release location, the surface lands and leases are owned by ANR Company. CW Mining subleases the coal from ANR Co.

Findings:

The information provided meets the minimum requirements of the Regulations.

SPOIL AND WASTE MATERIALS

Regulatory Reference: 30 CFR Sec. 701.5, 784.19, 784.25, 817.71, 817.72, 817.73, 817.74, 817.81, 817.83, 817.84, 817.87, 817.89; R645-100-200, -301-210, -301-211, -301-212, -301-412, -301-512, -301-513, -301-514, -301-521, -301-526, -301-528, -301-535, -301-536, -301-542, -301-553, -301-745, -301-746, -301-747.

Analysis:

Coal Mine Waste and Refuse Piles

The proposed reclamation topography is shown on Exhibit V-13 (dated 1998), and associated cross-sections for Slurry Pond 4 V-13C and for Slurry pond 5 V-13D. For all slurry ponds/refuse sites a total of 1,495,577 yd³ cut and a total of 1,490,117 yd³ fill is expected (p.2-39).

Appendix V-15 provides an estimation of cut (120,444 cu yds) and fill (125,259 cu yds) for slurry pond 5 including 5A. The information for Slurry pond 4/Refuse pile 2 was deleted upon completion of the reclamation. This Appendix should be adjusted to reflect the completion

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of Slurry pond 5 and the separate reclamation of slurry pond 5A. No changes to Appendix V-15 were found in the August 13, 2008 application.

Lifts of two feet and compaction to 90% maximum dry density are described in Section 541 (pg. 5-90). The MRP describes sixteen inches of soil cover over the mine waste based on the characteristics of the coal mine waste and on test plots (Sec. 231.200 ,p. 2-12 through 2-21 and App. III-5). In addition, Slurry Pond 5 was re-sampled on September 25, 1996 (Davidson, Field report) and found to be non-toxic/non acidic (Davidson memo dated 11/5/1996).

Findings:

The information provided does not meet the requirements of Tech Directive 006 “Requirements for Phased Bond Release” and the Rule:

R645-301-880.110, Appendix V-15 should be adjusted to reflect the completion of Slurry pond 5 and the separate reclamation of slurry pond 5A.

RECLAMATION PLAN

GENERAL REQUIREMENTS

Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR Sec. 784.13, 784.14, 784.15, 784.16, 784.17, 784.18, 784.19, 784.20, 784.21, 784.22, 784.23, 784.24, 784.25, 784.26; R645-301-231, -301-233, -301-322, -301-323, -301-331, -301-333, -301-341, -301-342, -301-411, -301-412, -301-422, -301-512, -301-513, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-533, -301-534, -301-536, -301-537, -301-542, -301-623, -301-624, -301-625, -301-626, -301-631, -301-632, -301-731, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-732, -301-733, -301-746, -301-764, -301-830.

Analysis:

The Permittee requested Phase I bond release on January 10, 2008 for portions of the Hiawatha Mine in the vicinity of the preparation plant. The Phase I bond release field inspection was conducted on October 8, 2008. Exhibit II-4A (map) shows the plans for reclamation and Phase 1. The total reclaimed acreage under consideration for Phase I bond release is 106.5 acres as detailed on page 2-37 of the MRP, Section 241.

Slurry pond 4/Refuse Pile 2	26.37 acres
Preparation plant	5.51 acres
Borrow Area F	9.12 acres
Slurry pond 5 main cell	40.39 acres
Affected acres reclaimed	19.83 acres.

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Findings:

The Permittee has met the minimum requirements of the Approximate Original Contour Restoration section of the Regulations.

APPROXIMATE ORIGINAL CONTOUR RESTORATION

Regulatory Reference: 30 CFR Sec. 784.15, 785.16, 817.102, 817.107, 817.133; R645-301-234, -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 requested Phase I bond release on January 10, 2008 for portions of the Hiawatha Mine in the vicinity of the preparation plant. The Phase I bond release field inspection was conducted on October 8, 2008. Exhibit II-4A (map) shows the plans for reclamation and Phase 1. The total reclaimed acreage under consideration for Phase I bond release is 106.5 acres as detailed on page 2-37 of the MRP, Section 241.

Slurry pond 4/Refuse Pile 2	26.37 acres
Preparation plant	5.51 acres
Borrow Area F	9.12 acres
Slurry pond 5 main cell	40.39 acres
Affected acres reclaimed	19.83 acres.

Findings:

The Permittee has met the minimum requirements of the Approximate Original Contour Restoration section of the Regulations.

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

The Permittee has continued a program to backfill and grade the areas mentioned above. Table II-13 shows the status of acreages and the topsoil source available once the surface is regraded to AOC.

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Findings:

The Permittee meets the minimum requirements of the Backfilling and Grading section of the regulations.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-240.

Analysis:

Redistribution

There are 290 acres in the Hiawatha disturbed area (as listed on the Hiawatha Inspection Report form). However, the MRP reports a total of 360 disturbed acres, of which, 250 acres will be reclaimed to wildlife and range habitat (Sec. 333, p. 36, dated 07/11/08).

Excluding roads, there are 221.36 disturbed acres are in the lower Hiawatha area (Sec. 241, p 37). Page 2-37 reports 106.5 acres have been reclaimed and Table II-13 itemizes the remaining reclamation work to be completed, including those areas not listed on page 2-37, such as Slurry Pond 5A Table III-3 lists approximately 112 acres within the lower Hiawatha area that will not be reclaimed as follows: roads 30.3 acres; railroad yard 15.2 acres; town 66.3 acres. The areas of reclamation in the vicinity of the preparation plant are illustrated on Exhibit II-4. Exhibit II-4A and pg. 2-37 provides the status of reclaimed and affected lands as of 2008 as follows:

- 26.37 acres of the 26.37 acre slurry pond 4/refuse pile 2 reclaimed;
- 5.51 acres of the 23.87 acre preparation plant reclaimed;
- 9.12 acres of Borrow Area F (all) reclaimed;
- 40.39 acres of the 40.39 acre Slurry pond 5 main cell reclaimed (15.51 acres remain active as a sediment basin as reported in Table II-13);
- 19.83 acres of the 29.11 affected acres reclaimed.

The total reclaimed acreage under consideration for Phase I bond release is 106.5 acres as detailed on page 2-37 of the MRP, Section 241. According to information on page 2-37, that leaves 39.23 acres to be reclaimed in the lower Hiawatha area. Exhibit II-4A provides a reference for the location of the reclaimed and remaining acres identified on page 2-37.

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Earthwork (including seeding) at the Slurry pond 4/Refuse Pile 2, Slurry Pond 5 Main Cell, a portion of the Preparation Plant, and Borrow areas A and F was undertaken during the years 1996 – 2001 (according to Division records and the 2005 Annual Report). Refuse pile No 2 was constructed over Slurry Ponds 2 and 3 (pg. 5-78). Coarse refuse from Refuse pile #2 was pushed over the fines in Slurry Pond #4 during reclamation. The outslope was reduced to 4h:1v. The Slurry Pond #4/Refuse 2 site, along with borrow area F was seeded in 1996 (p. 2-39)

Slurry pond 5 (main cell) was re-mined and the embankments were pushed inward to a grade of 5h:1v. (2-39). Substitute topsoil from Borrow Area "A" was applied to a depth of sixteen inches. Seeding of at Slurry Pond #5 (main cell) was completed in the fall 1999 (p. 2-37, 2-39 and Table 5-7) or in the Fall of 2000 (Appendix VIII-5). The work is described in Sections R645-301-241, -242, -243, -244 and R645-301-541 of the MRP. Depth of topsoil application and seeding treatments are shown on Ex. II-4. Seed mix No 1 (Table III-5) was used on the borrow areas and seed mix #2 (Table III-6) was used on the slurry impoundments and refuse areas.

Site visits on April 18 and 23, 2008 documented surface roughening and the 16 inch topsoil cover depth on slurry ponds and refuse piles (shown on Ex II-4). Method of mulch application and type of mulch is not known.

Almost twenty acres described as "Affected Areas" have been reclaimed and are shown on Ex. II-4A as RA-1. They include sediment ponds and areas of coal fine accumulations. Future accumulations of coal fines will be placed either in slurry pond #1 or in Slurry pond #5A (pp. 5-104 and 5-106 of Sec. 541).

HCCI committed to sampling and analysis of replaced topsoil (pg. 2-10, and pg. 5-104). Division records dated March 17, 1997 indicate that soil analysis from topsoil on Slurry pond #5 were received. The analyses resulted in a fertilizer recommendation. A fertilizer recommendation was also made for Slurry Pond #4 (Davidson memo dated October 8, 1996). The bond release should confirm methods of fertilization of the reclaimed sites (slurry, refuse, and borrow areas). The bond release should provide results of any testing done since 1997, on the east half of slurry pond five. No further information was received on August 13, 2008.

Table II-12 and page 2-10 relates the depth of and volume of soil cut from Borrow Area A. The MRP describes separate handling of the surface horizons from borrow area A for replacement onto the borrow areas after reclamation (pg.2-41 and pg. 5-108). However, a Division field report dated December 3, 1996 indicates that this procedure may have been abandoned. The bond release application should also verify whether the lowest excavated horizon at borrow area A was ripped and seeded or whether the lowest horizon excavated was covered with stockpiled surface soil and then seeded. No further information was received on August 13, 2008.

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There are 54.74 acres remaining to be reclaimed in the Hiawatha Area (pg. 2-37 and Table II-13). The proposed reclamation of Slurry Ponds 1 and 5A is described on pages 2-39 through 2-42. Sampling commitments for acid/toxic forming materials are included in this description. The northern portion of slurry pond 5, which is referred to as pond 5A was authorized in 2001* to receive coal mine waste from the Bear Canyon Mine. Slurry pond 5A is also being remined (pg 5-29, dated 2007). Slurry pond 5A is also used for run-off control (pg. 5-64) and will be the last structure to be reclaimed (pg. 5-78).

*According to amendment AM01C waste was to be sampled and analyzed. Potentially acid/toxic forming refuse placed in Slurry pond 5A will be covered with four feet of soil. The 2005 and 2006 annual reports indicate that no refuse had been brought to "the north cell" of slurry pond 5 since 2001.

Findings:

The information provided does not meet the requirements of Tech Directive 006 "Requirements for Phased Bond Release" and the Rule:

R645-301-121.200 and R645-301-880.110, HCCI committed to sampling and analysis of replaced topsoil (pg. 2-10). Division records dated March 17, 1997 indicate that soil analysis from topsoil on Slurry pond #5 were received. The analyses resulted in a fertilizer recommendation. The bond release application should confirm methods of fertilization of the reclaimed sites (slurry, refuse, and borrow areas).

- The application should provide information on further testing, if any, done since 1997, on the east half of slurry pond five.
- The MRP describes separate handling of the surface horizons from borrow area A for replacement onto the borrow areas after reclamation. However, a Division field report dated December 3, 1996 indicates that this procedure may have been abandoned. The bond release application should verify whether the lowest excavated horizon at borrow area A was ripped and seeded or whether the lowest horizon excavated was covered with stockpiled surface soil and then seeded.
- The bond release application should also settle questions of depth and volume cut from Borrow Area A as recorded in Table II-12 and on p. 2-10.

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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:

Hydrologic Reclamation Plan

The Permittee meets the requirements of R645-301-760 since the reclamation plans in the MRP and information in the Phase I bond release application identify how runoff and sediment is controlled and contained on site with hydrologic structures or surface roughening. Earthwork consisting of grading, gouging and seeding have been completed on those areas identified on Exhibit II-4A for bond release. The hydraulic structures for disturbed areas, unreclaimed, will remain in the areas not proposed for Phase I bond release. The procedure of surface roughening by gouging is showing to be a good method of capturing and holding rainfall, preventing runoff and providing a source of water for vegetation reestablished on disturbed area at minesites in Utah.

Four sedimentation ponds treat the coal loadout and refuse and slurry ponds areas. Sedimentation Pond #3 treats the upper coal storage yard. Sedimentation Pond #4 captures runoff from Refuse Pile No.1 and Slurry Pond No. 1. Sedimentation Pond #5 use to collect runoff from Slurry Pond #4 and Topsoil Pile. Sedimentation pond #6 is treating runoff from the northern embankment of Slurry Pond No. 5. Sedimentation Pond No. 007 collects runoff from the southern embankment of Slurry Pond No. 5. Sedimentation Pond 7 is treating runoff from the area and will be removed after Phase III Bond Release. The sedimentation ponds will remain in place until the supply areas meet Phase II requirement and receive approval. The hydrologic structures within Borrow Area A will remain in place until Slurry pond 5A is reclaimed.

Surface-water monitoring.

HCC continues to monitor ten surface water sites in the canyons and adjacent to the surface facilities. Monitoring will continue through the end of reclamation and final bond release. The Division has not received proposals from HCC to discontinue monitoring at any of these sites. Locations of surface-water monitoring sites are on Plate 7-1 in the application.

Acid and toxic-forming materials.

Numerous places in the text describe how there are no acid- or toxic-forming materials at this site. Included are Chapter 6, Geology, Chapter 5, Engineering, and Chapter 7, Hydrology. It appears this is not a problem at this site.

Transfer of wells.

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No wells, piezometers or boreholes exist on the reclamation site.

Discharges into an underground mine.

No discharges of surface water will be made to underground mines.

Gravity discharges.

No gravity discharges will be made from an underground mine.

Water quality standards and effluent limitations.

Although there are sedimentation ponds in the vicinity of the reclamation sites, Sedimentation Ponds #3, #4, #6, and #7 (Northeast Slurry Pond #5 has been reclaimed).

Diversions.

All corrugated metal culverts were removed in the areas proposed for Phase I reclamation.

Sediment control measures.

The sediment control measures during reclamation include silt fences and straw bales, which are considered adequate when used as described.

Findings:

The information provided in the MRP meets the minimum requirements of Hydrology Information section of the Regulations.

STABILIZATION OF SURFACE AREAS

Regulatory Reference: 30 CFR Sec. 817.95; R645-301-244.

Analysis:

Surface roughness for the slurry ponds were achieved by either a ripper or backhoe (Section 541, pg. 5-104). The borrow areas were to be ripped, disked, and raked prior to seeding and mulching (Sec. 541, pg. 5-109). Reclamation treatments are shown on Ex. II-5 and discussed in Sec. 341.230. The MRP states that mulch type and application may vary, but that

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the regraded borrow site and access road and the slurry ponds were to be treated with 1 ton/acre mulch.

No further information was found in the August 13, 2008 application. The bond release application should document method of mulch application and type of mulch.

Site visits on April 18 and 23 documented roughening on reclaimed areas, but revealed an erosion problem on the north side of Slurry Pond #4 (See Insp. Rpt. # 1621). I returned to the ditch north of Slurry Pond #4 on October 7, the day before the official bond release inspection and noted that the repair of the ditch was being undercut and should be observed by the Division regularly prior to the Phase II bond release request (see Insp. Rpt. #1793).

Findings:

The information provided does not meet the requirements of Tech Directive 006 "Requirements for Phased Bond Release" and the Rule:

R645-301-880.110, The bond release application should confirm type of roughening employed at slurry ponds and the borrow areas and detail type of mulch, rate of application and method application on each site.

BONDING AND INSURANCE REQUIREMENTS

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

Analysis:

General

The requirements for Phase I bond release application are outlined in Tech Directive 006. The partial bond release available for a Phase I application is outlined in R645-301-880.310.

Phase I bond release for the 106.5 acres associated with Slurry pond 4/Refuse Pile 2, Slurry Pond 5 Main Cell, a portion of the Preparation Plant, and Borrow areas A and F is what is being evaluated. The regraded and topsoiled area to receive Phase I bond release, is located in Sec. 27, 34 and 35 of T. 15 S., R. 8 E., east of the railroad tracks (mainline). As Built information was provided with a bond release application received on August 13, 2008, as required by R645-301-880.210.

GENERAL CONTENTS

Determination of Bond Amount

Analysis:

The Phase I bond release application contains seven affected areas which contain mostly undisturbed native vegetation. Each will be discussed here.

RA-1A comprises 2.1 acres of native vegetation, which appears to be in very good condition. RA-1A is adjacent to the junction of State Highway 122 with the Mohrland road (Carbon County road # 338), but it can also be located as being the west corner of slurry pond #5. It is felt that ripping and seeding of this area would negatively affect this area, and no further reclamation work is felt to be necessary here.

An average cost / acre for backfilling and grading / Phase I was determined by dividing a total cost for backfilling and grading for Phase 1 from the September 2008 bond revision (\$ 404,633.00) by the total number of disturbed acres (290 acres). This equates to \$ 1,395.3 per acre for backfilling and grading. Since no ripping and re-seeding is felt necessary here, an amount to be released for the Phase I application for the area can be determined:

(2.1 acres) (\$ 1,395 / acre) = \$2, 930. \$2,930.00

RA-1B is 1.83 acres in size and is the shape of a wedge, existing between the end of highway 122 and the Utah railway tracks. The point of the wedge is at the Hiawatha Town rail crossing. About fifty percent of the surface area of RA-1B has received heavy encroachment by coal material being pushed over by various operators. The remaining 50 % of the surface area contains native vegetation that is well developed. The Division does not believe any bond moneys should be released here until the Permittee removes as much coal material as possible, in cooperation with the Utah Railway.

Therefore, \$ 0 are to be released. \$ 0.00

RA-1C consists of 4.96 acres which lies north of State Highway 122, east of slurry pond #4 / refuse pile #2, yet west of borrow area "F", (RA-6). This area has been roughened and revegetated. Minor amounts of coal waste can be seen about the surface, but these appear to have had little or no affect on revegetation of the area. This area is in ts final surface

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configuration and no further work is anticipated here, The amount of Phase I backfilling and grading moneys to be released is determined at

(4.96 acres)(\$1395.3 Backfill / grade / acre) = \$ 6,921.00
\$ 6,921.00

RA-1D is 3.17 acres of undisturbed outslope north of sediment pond 004, which lies immediately north of slurry pond 001 where coal fines recovery is currently happening. Adjacent to and north of RA-1D is depicted "potential" / proposed borrow area "E" (6.5 acres).

The Permittee has stated that the borrow area "E" soil volume will not be utilized for reclamation needs, as adequate volumes exist elsewhere in the permit area. These volumes are also permitted.

The Division is nervous about releasing the RA-1D area as part of the Phase I application for three reasons;

- 1) the recovery of fines from slurry pond #1 causes the length, width and depth dimensions to continue to lengthen. The Permittee does not know what the final dimensions of this pit will be when reclamation is initiated.
- 2) The Permittee has only reclaimed 101.5 acres of the 290 acres of total mine disturbance (35%).
- 3) Although the Permittee has stated that alternative borrow area "E" will not be utilized, this volume is the closest haul and push distance to the RA-10 reclamation area (slurry pond #1). It seems likely that the "E" volume would be a more economic way to topsoil the reclaimed slurry cell 001 area than to have to load, haul, and dump soil volumes from more distant areas.

Because the potential exists that disturbance of RA-1D could occur during the backfilling and grading of slurry pond 001 or the recovery of topsoil from borrow area "E", the Division will not consider the 3.17 acres associated with RA-1D affected area for Phase I bond release at this time.

Therefore the amount of dollars to be considered for Phase I release for RA-1D is zero at this time.

The amount of backfill and grading dollars and revegetation for Phase I is zero. No backfilling has occurred; the area RA-1D is undisturbed native vegetation. No revegetation has been performed in this area to date.

GENERAL CONTENTS

RA-1E consists of 6.24 acres of undisturbed native vegetation, exposed middle fork road cut slope, and a small area (300 foot length) NE of the upper rail yard access road off-chute. RA-1E encompasses the Middle Fork topsoil pile (354 cubic yards). The stored topsoil volumes in South and Middle Forks fall way short of having adequate volume to reclaim those areas.

Much of RA-1E contains undisturbed vegetation. Part of RA-1E is an exposed cut bank through which the Middle Fork road was developed to an acceptable grade. Minor amounts of coal are present where the native vegetation has survived. It is unlikely that further reclamation activities will occur where the vegetation has survived or the road cut was made.

RA-1E is part of the Phase I bond release application. The Division believes this 6.24 acre area should be released as further reclamation work is not anticipated.

(6.24 acres) (\$ 1,395.3 Backfill / Grade) = \$ 8,707.00 \$ 8,707.00

RA-1F consists of 0.98 acres which is undisturbed; the area is located in the "V" of the Middle Fork and South Fork road junction. Minor amounts of carbonaceous material are present, however, the native vegetation does not appear to having been affected. No grading or backfilling has occurred in this area. No further reclamation is seen as being necessary here.

The Division believes this area should be released for Phase I.

(0.98 acres) (\$1,395.3 / backfill acre) = \$ 1,367.40 \$ 1,367.40

RA-1G encompasses 0.55 acres. It is located at the southern tip of the slurry pond #5 reclaimed area, adjacent to the Mohrland road (Carbon County road # 338). The established vegetation is native and undisturbed. Some coal and waste material is visible on the surface of the acreage, but the affect of that material on the vegetation is negligible at best. This area should be released in this Phase I bond release application as no further reclamation activity is anticipated.

The amount to be released relative to backfilling and grading is calculated as follows:

(0.55 acres) (\$ 1,395.3 / acre BF & G) = \$ 767.42 \$ 767.42

GENERAL CONTENTS

December 10, 2008

RA-4 (5.28 acres) is 30 % of Borrow Area "A" which is located south of State Highway 122 on the east end of the permit boundary. Additional soil recovery from the area will not occur; the area has been revegetate. No further backfilling or grading activities will occur. The area should be released as part of this Phase I bond release application.

The dollar amount, which should be released, equates to:

$$(5.28 \text{ acres}) (\$ 1,395.3 \text{ BF \& G } \$/\text{acre}) = \$7,367.20 \qquad \$7,367.20$$

Slurry Pond #5 (RA-2) is the largest area reclaimed to date within the Hiawatha Mine complex, constituting 40.39 acres. The pond 5A area encompasses 15.51 acres and is not being considered as part of this Phase I bond release application. The associated acreage has been backfilled with coal mine waste, graded to have 3H:1V outsoles, top soiled, roughened and revegetated.

The amount of Phase I dollars to be released for this reclamation area is calculated as thus:

$$(40.39 \text{ acres}) (\$ 1,395.3 \text{ BF \& G } / \text{ acre}) = \$ 56,356.00$$

\$ 56,356.00

Slurry pond #4 / refuse pile #2 (RA-5) encompasses 26.37 acres. This area has also been backfilled with coal waste and graded to 3H : 1V outsoles, and then topsoiled. Surface roughening and revegetation have also occurred. The Permittee has applied for Phase I bond release of this area.

RA-5 should receive a Phase I release for backfilling and grading.

$$(26.37 \text{ acres}) (\$ 1,395.3) = \$ 36,794.00 \qquad \$ 36,794.00$$

Revegetation for Phase I has been completed for RA-5. Therefore, an amount of (26.37 acres) (\$ 1,651 / acre) = \$ 43,537.00 will be released.

$$\qquad \$ 43,537.00$$

GENERAL CONTENTS

The preparation plant area (RA-7) received demolition, backfilling, and grading activities on 5.51 acres.

Demolition costs are listed at \$ 122,196.00. Since this is a Phase I application an amount of \$ 122,196.00 X (0.60) = \$73, 317 will be allowed for the demolition cost (Phase I).

A backfilling and grading cost of (5.51 acres) (\$ 1,395.3 / acre) = \$7,688.00 will be released.

A revegetation cost of 5.51 acres (\$ 1,651.00 / acre) = \$ 9,038.00 will be released.

Topsoil borrow area "F" comprises 9.12 acres. In accordance with the requirements of the mining and reclamation plan, (See page 5-109.) this area was graded, ripped, disked, roughened, roughened, seeded, raked, fertilized and mulched by U.S. Fuel Company prior to the purchase of the Complex by Hiawatha Coal Company. This area received a Phase 1 bond release inspection on October 8, 2008. 9.12 acres are associated with reclamation area RA-6.

The Division believes that this area should receive a Phase I bond release for backfilling and grading and Phase I revegetation. No demolition costs are considered for this area. Therefore

- 1) (9.12 acres) (\$1,395.3 BF&G / acre) = \$ 12,725.14 to be released for backfilling and grading.
 - 2) (9.12 acres) (\$ 1,651 REVEGPH1) = \$ 15, 057.12 to be released for revegetation.
-

A subtotal of the direct costs for the twelve listed reclamation areas is as follows:

Backfilling and Grading.....	\$ 141,622.69
Demolition Cost.....	\$ 73,317.60
Revegetation	\$ 154,689.34
	<hr/>
Subtotal Direct Costs.....	\$ 369,629.63

GENERAL CONTENTS

Indirect costs have been calculated as follows:

- 1) Mob / Demob = 10 % (369,629.23) = \$ 36,963.00
- 2) Contingency = 5% (\$ 369,963.00) = \$ 18,481.00
- 3) Engineering / Redesign = 2.5 % (\$369,629.23) = \$ 9,241.00
- 4) Main Office Expense = 6.8% (\$369,629.23) = \$ 25,135.00
- 5) Project Management Fee = 2.5% (\$369,629.23) = \$ 9,241.00

Subtotal Indirect Costs.....\$ 99,061.00

Total Cost\$ 468,691 for Phase I Release

Phase I Escalated = \$ 468,691.00 (1.032) =\$ 483,689.00

Rounded to Nearest \$1,000 =\$ 484,000.00

Findings:

The analysis of the Phase I bond release application and the inspection of this site have determined that the Permittee needs to perform additional work in certain areas to receive Phase I for those areas. Other areas are considered as having the Phase I requirements completed. The Division believes an amount of

\$ 484,000.00

should be released as part of this application for Phase I, Task ID # 3035.

CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT (CHIA)

Regulatory Reference: 30 CFR Sec. 784.14; R645-301-730.

Analysis:

The Permittee has submitted a Probable Hydrologic Consequences assessment and pertinent information in the Geology and Hydrology sections of the MRP. No changes to the CHIA will be necessary.

Findings:

The information provided by the Applicant in the PHC, Geology and Hydrology sections of the MRP meet the minimum requirements for the Cumulative Hydrologic Impact Assessment section of the Regulations.

RECOMMENDATION

This Phase I bond release application, Task ID # 3035, cannot receive a recommendation for approval until four items are addressed;

- a. The Permittee must address the three deficiencies aired on pages 3, 10 and 13.
- b. The Division must receive concurrence from the OSM that the requirements for Phase I have been met.