GARY R. HERBERT
Governor
GREG BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Technical Analysis and Findings

Utah Coal Regulatory Program

August 27, 2015

PID: C0070035
TaskID: 4946
Mine Name: SUNNYSIDE REFUSE & SLURRY
Title: MIDTERM PERMIT REVIEW

General Contents

Identification of Interest

Analysis:

The minimum requirements of R645-301-112 were met.

The Division performed a cross check with the Applicant/Violator System. No errors in the ownership or control information were identified.

ssteab

Violation Information

Analysis:

The minimum requirements for R645-301-113 were met.

An AVS Evaluation was generated on 7/6/15. The report identified no violations.

ssteab

Reporting of Technical Data

Analysis:

On June 30th the Division notified SCA of the initiation of the Mid-term review. This memo will include a review of items A and B as related to Biology, Landuse and Cultural resources:

A. Review of the Plan to ensure that the requirements of all permit conditions, division orders, notice of violations (NOV), abatement plans, and permittee-initiated Plan changes approved subsequent to permit approval or renewal (whichever is the most recent) are appropriately incorporated into the Plan document.

There have been no division orders, notice of violations (NOV), abatement plans, permittee-initiated Plan changes approved subsequent to permit approval or renewal.

B. Ensure that the Plan has been updated to reflect changes m the Utah Coal Regulatory Program which have occurred subsequent to permit approval or renewal.

Topsoil salvaging and distribution were discussed at two areas on the coarse refuse pile during the on site visit. They

included a portion of the North East corner of the coarse refuse pile that had been reclaimed in 2011 and a portion of the middle of the pile that had been mined down to the original surface contour. The type and volume of topsoil used in the reclaimed area as well as the volume of soil to be salvaged from the original surface area must be provided as an amendment to the current MRP. Locations should be shown on map 2-1 and possibly 5-2. In order to initiate the ten year liability period beginning in 2011 on the reclaimed area SCA could only do supplemental seeding for the first four years of the liability period or 2015. Optional MRP update: SCA may want to retain the topsoil borrow area sediment pond as a wildlife enhancement structure as referred to in section R645-301-342.100 of the coal rules. This would require a minor amendment to the reclamation portion of the current MRP.

C. Review applicable portions of the permit to ensure that the Plan contains commitments for application of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.

D. Evaluate the compliance status of the permit to ensure that all unabated enforcement actions comport with current regulations for abatement; verify the status of all finalized penalties levied subsequent to permit issuance or permit renewal, and verify that there are no demonstrated patterns of violation (POV). This will include an AVS check to ensure that Ownership and Control information is current and correct.

E. Evaluate the reclamation bond to ensure that coverage adequately addresses permit changes approved subsequent to permit approval or renewal, and to ensure that the bond amount is appropriately escalated in current-year dollars.

F. Evaluate the permit for compliance with variances or special permit conditions.

G. Optional for active mines, mandatory for reclamation only sites: conduct a technical site visit in conjunction with the assigned compliance inspector to document the status and effectiveness for operational, reclamation, and contemporaneous reclamation practices undertaken on predetermined portions of the disturbed area to minimize, to the extent practicable, the contribution of acid or toxic materials to surface or groundwater, and to otherwise prevent water pollution.

Deficiencies Details:

SCA should make the following updates to their MRP in accordance with R 645-301-121.100:

Topsoil salvaging and distribution were discussed at two areas on the coarse refuse pile during the on site visit. They included a portion of the North East corner of the coarse refuse pile that had been reclaimed in 2011 and a portion of the middle of the pile that had been mined down to the original surface contour. The type and volume of topsoil used in the reclaimed area as well as the volume of soil to be salvaged from the original surface area must be provided as an amendment to the current MRP. Locations should be shown on map 2-1 and possibly 5-2. In order to initiate the ten year liability period beginning in 2011 on the reclaimed area SCA could only do supplemental seeding for the first four years of the liability period or 2015. Optional MRP update: SCA may want to retain the topsoil borrow area sediment pond as a wildlife enhancement structure as referred to in section R645-301-342.100 of the coal rules. This would require a minor amendment to the reclamation portion of the current MRP.

jhelfric

Completeness

Analysis:

The Division initiated a mid-term review of the Sunnyside Refuse and Slurry mining and reclamation plan (Task ID #4946) on August 11, 2015 in accordance with R645-303-211. This Technical Memorandum presents the findings of the Midterm Permit review for the Sunnyside Refuse and Slurry related to engineering and bonding, including:
• A review of the Plan to ensure that the requirements of all the permit conditions, Division orders, notice of violations (NOVs), abatement plans, and permittee-initiated Plan changes approved subsequent to permit approval or renewal are appropriately incorporated into the Plan document.
• A review of the application portions of the permit to ensure that the mine plan contains the commitments for the application of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.
• Evaluate the compliance status of the permit to ensure that all unabated enforcement actions comport with current regulations for abatement; verify the status of all finalized penalties levied subsequent to permit issuance or permit renewal, and verify that there are no demonstrated patterns of violation (POV). This will include an AVS check to ensure that Ownership and Control information is current and correct.
• Evaluate the reclamation bond to ensure that coverage adequately addresses permit changes approved subsequent to permit approval or renewal, and to ensure that the bond amount is appropriately escalated in current-year dollars.

• Evaluate the permit for compliance with variances or special permit conditions related to engineering and bonding.
• Optional for active mines, mandatory for reclamation only sites: conduct a technical site visit in conjunction with the assigned compliance inspector to document the status and effectiveness for operational, reclamation, and contemporaneous reclamation practices undertaken on predetermined portions of the disturbed area to minimize, to the extent practicable, the contribution of acid or toxic materials to surface or groundwater, and to otherwise prevent water pollution. See Inspection report #5269 for details of the Division technical site visit.

The Permittee has not submitted a formally revised reclamation cost estimate and will do so by September 11, 2015. The Division conducted a site inspection with the Permittee on August 11, 2015. At the site inspection the Permittee provided the Division with a draft version of the reclamation bond information that was reviewed and discussed within this memo for adequacy.

cparker

Environmental Resource Information

Permit Area

Analysis:

The application meets the minimum requirements of R645-301-521.140 due to information stated in the mine plan details and plates which match the provided legal description of the mine boundary. The Permittee maintains current UPDES Permit, UT0024759, and air quality Title V operating permit, #70003001, for operations at the site. The MRP was amended to require the Permittee to supply a map to the Division detailing the areas of the Sunnyside permit remined during the said year, See Chapter 9, section 9.6.

cparker

Operation Plan

Mining Operations and Facilities

Analysis:

The application meets the minimum requirements of R645-301-523, -526, and 528 by addressing the mining operations conducted at the Sunnyside Refuse site. The application meets the minimum requirements of R645-301-523 by including a description of the mining operation, method of coal mining, engineering techniques, anticipated annual and total production of coal by tonnage, and major equipment to be used for all aspects of those operations proposed to be conducted during the life.

The Permittee maintains current UPDES Permit, UT0024759, and air quality Title V operating permit, #70003001, for operations at the site. Since the last Permit renewal, Task ID 4140, in 2012 the Permittee has submitted the quarterly water reports to the Division, completed three annual reports, and updated corporate officers. A current pending task in the Division database is Task ID 4963, updating various culverts and road alignments for future ash transportation through the site. SCA gathers soil samples from the Excess spoil disposal Area #2,Phase 2 to send to BYU lab annual. Current operations at the site include the excavation of Coarse and Fine refuse from the refuse pile, supplemented by fines from the Wellington Prep Plant.

cparker

Coal Recovery

Analysis:

The application meets the minimum requirements of R645-301-522 due to a discussion of the measures to be used to maximize the use and conservation of the coal resources. In 2012 SCA burned 63,342 ton of Coal from the Sunnyside permit area along with 286,478 tons of coal from the Star Point facility and 160,585 tons of coal for SCT. In 2013 SCA burned 129,798 tons of coal from the Sunnyside Permit area along with processing 356,486 tons of coal from the Star Point Facility. In 2014 SCA burned approximately 117,027 tons of coal excavated from the Sunnyside site along with an additional 369,657 tons from Star Point refuse.

cparker

Topsoil and Subsoil

Analysis:

Analysis:
Topsoil piles are shown on drawing 5-1. Quantities of stockpiled topsoil are listed in MRP Section 234. This list of quantities should be revised to reflect current conditions, since the clearwater pond topsoil stockpile was consumed in reclamation of the Excess Spoil Pile #2.

Soil borrow areas are identified on drawing 5-1 and volumes are outlined in Section 224. Distribution of borrow area soils is shown on Plate 10-6. Test plots established in the 1980's are described as on-going in the MRP Section 230. A report on the test plots from 1982 appears to be the most current information on the test plots. A summary of the more recent test plot results concerning appropriate reclamation techniques and procedures should be added to the narrative of the MRP section 230.

Deficiencies Details:

R645-301-121.100,
1) Quantities of stockpiled topsoil are listed in MRP Section 234. This list of quantities should be revised to reflect current conditions, since the clearwater pond topsoil stockpile was consumed in reclamation of the Excess Spoil Pile #2.
2) A report on the test plots from 1982 appears to be the most current information on the revegetation test plots. A summary of the more recent test plot results concerning appropriate reclamation techniques and procedures should be added to the narrative of the MRP section 230.

pburton

Spoil Waste Excess Spoil

Analysis:

Analysis:
The Permittee has met the requirements for spoil sampling and analysis. Approximately 59,710 tons of excess spoil waste were placed in the Phase 2 Excess Spoil pile #2 during 2014.

pburton

Spoil Waste Excess Spoil

Analysis:

The application meets the minimum standards or R645-301-528.322 due to not changes in the MRP text. In 2011 SCA submitted an amendment that enlarged the Excess Spoil Disposal Area #2 by adding Phases 2 and 3 and reclaimed Phase 1. Since SCA's permit renewal in 2012, Task ID #4140, Phase 1 of Excess spoil disposal Area #2 was reclaimed. The area was seed in Fall 2012. As outlined in the MRP commitments section 731.300 through 320 (page700-15), SCA completed sampling of materials placed in the Excess Spoil Disposal Area #1 in March 2012 and submitted the results to the Division with the 1st and 4th Quarter 2012 inspection reports. Approximately 86,323 tons of material was placed in excess spoil disposal area #1 in 2012. No new material was placed in the excess spoil disposal area #2 during 2012. In 2013, under Task ID #4563 2013 Annual Report, no spoil was place in Excess Spoil disposal area #1 and approximately 85,505 tons of material was placed in the Excess spoil disposal area #2. The remaining capacity of the disposal area is 140,000 CY. In 2014 SCA completed the sampling of material placed in the Excess spoil disposal area #1 as samples were sent to BYU soil lab for results and provided to the Division within the 2014 Annual Report and 1st quarter 2015 Inspection report. The 2014 Annual report also states that the Permittee placed approximately 59,710 tons of material in the Excess spoil disposal area #2, phase 2.

cparker

Hydrologic General

Analysis:

The information contained within the currently approved MRP is sufficient to meet the requirements of the State of Utah R645-301 Coal Mining Rules.

Item C of the midterm review process states that the Division will ""Review applicable portions of the permit to ensure that

the Plan contains commitments for application of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.""

The operational drainage plans described in Chapter 7 of the MRP and hydrologic maps are currently being revised under Task ID 4963. Culverts, ditches and ponds will be reviewed with this task and any changes need to ensure the plan is using BTCAs will be addressed as deficiencies to this task.

adaniels

Signs and Markers

Analysis:

The application meets the minimum requirements of R645-301-521.200 by the general discussion of signs. All the appropriate signs were witnessed by Division staff during the site inspection.

cparker

Reclamation Plan

Contemporaneous Reclamation General

Analysis:

Analysis:
The Permittee has completed contemporaneous reclamation on Phase 1 of Excess Spoil Pile #2.

Section 9.6.5 (p. 900-12) describes reclamation of Excess Spoil #2. There are three phases to the Excess Spoil Pile #2 (see Plate 9-8E). Phase 1 was reclaimed in 2011 with four feet of cover and seeded in December 2011. Phase 1 was reseeded in the fall of 2012. Phase II is being constructed and has a life of approximately 15 years, based upon current rates of deposition.

pburton

Contemporaneous Reclamation General

Analysis:

The minimum requirements of R645-301-553 of backfill and grading are met within the application as there is no change to the existing MRP grading reclamation details. The Permittee completed Phase 1 reclamation of the Excess spoil pile #2 in 2011 and reseeded in 2012 and 2013. The Permittee will test the soil in area for Phase 3 of Excess spoil pile #2 for suitability as a cover material to be placed during the coming reclamation of Phase 2 of excess spoil pile #2. The Permittee will make amendments to the soil as need to meet the cover material requirements.

cparker

Bonding and Insurance General

Analysis:

The application meets the minimum requirements of R645-301-800 as the applicant is current on the bond and insurance standings. The bon which is currently in place to ensure the reclamation of 196.65 acres of disturbance within the Sunnyside Refuse permit area is a collateral bond based on treasury securities held by Wells Fargo.

cparker

Bonding Form of Bond

Analysis:

The application meets the minimum requirements of R645-301-860.100 as the applicant currently maintains a collateral

bond amount of $1,775,000 which is held by Wells Faro Treasury Securities posted 1/16/02 and 12/13/05. The amount was increased to $1,755,000 with the bond renewal amendment approved on 2/22/06. The Permittee and Division approved an authorized reduction to $1,569,000 as of the results of the last Midterm review (#3655) on 6/1/11.

cparker

Bonding Determination of Amount

Analysis:

The application meets the minimum requirements of R645-301-830.140 as the Permittee submitted detailed bond information in regards to the application. The Permittee submitted a draft version of the bond calculations to the Division on August 11, 2015 with updated 2015 unit costs received from local construction companies, the Caterpillar Performance handbook 2015, and the 2015 R.S. Means Heavy Construction Cost Data Handbook. Soil volumes estimated to reclaim the disturbance were obtain from the approved reclamation plan with the cost estimate subsequently determined. The updated demolition, earthwork, and revegetation costs result in a bond amount of $1,532,000.

Deficiencies Details:

The application meets the minimum requirements of R645-301-830.140 as the Permittee submitted detailed bond information in regards to the application. The Permittee submitted a draft version of the bond calculations to the Division on August 11, 2015 with updated 2015 unit costs received from local construction companies, the Caterpillar Performance handbook 2015, and the 2015 R.S. Means Heavy Construction Cost Data Handbook. Soil volumes estimated to reclaim the disturbance were obtain from the approved reclamation plan with the cost estimate subsequently determined. The updated demolition, earthwork, and revegetation costs result in a bond amount of $1,532,000.

The applicant will submit official updated bond sheets to the Division by Sep. 25, 2015.

cparker

Bonding Terms and Conditions Liability Insurance

Analysis:

The application meets the minimum requirements of R645-301-850 as the applicant currently holds liability insurance through Federal Insurance Company, effective until 8/1/16. The insurance includes the required Marsh from, explosives and claims made per occurrence.

cparker