



GARY R. HERBERT
Governor

SPENCER J. COX
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

August 7, 2018

Kenneth S. Fleck, Manager of Geology and Environmental Affairs
Interwest Mining Company
P.O. Box 310
Huntington, Utah 84528

Subject: Completion of Midterm Review, Task #5682, PacifiCorp, Deer Creek Mine,
C/015/0018

Dear Mr. Fleck:

On May 23, 2018, PacifiCorp was informed that the Division of Oil, Gas and Mining (the Division) had commenced a midterm permit review for the Deer Creek Mine.

The midterm review has now been completed and will now be closed; however, the Division has identified deficiencies that must be addressed. The deficiencies have been included with this letter (See Attached). The name of the author for each of the respective deficiencies has been provided.

Your response to these deficiencies will need to be submitted as an amendment to your MRP and will be processed as a separate task. Please submit the required amendment with the accompanying C1 and C2 forms by no later than September 14, 2018.

If you have any questions regarding these requirements or the Midterm Review process, please don't hesitate to call me at 801-538-5325.

Sincerely,

Daron R. Haddock
Coal Program Manager

DRH/sqs
O:\015018.DER\WG5682 MIDTERM\MidtermCompletion.doc





Technical Analysis and Findings

Utah Coal Regulatory Program

PID: C0150018
TaskID: 5682
Mine Name: DEER CREEK MINE
Title: MIDTERM PERMIT REVIEW

Summary

A mid-term review inspection was conducted on 7/18/2018 (Inspection Report #6196). Over the past two years, the Rilda and Deer Creek portals were sealed. Water collection and flow monitoring devices were installed at both Rilda and Deer Creek portals. (Currently there is no discharge from the Deer Creek portal and less than 2 gpm from the Rilda portal.) During the inspection, Impact demolition company was demolishing structures and salvaging materials at the Deer Creek and Rilda facilities. Both facilities are scheduled for backfilling and grading in the next year. In June 2018, the Trail Mountain forest fire devastated the watershed surrounding the Rilda Facilities. Rilda vegetation reference areas were destroyed. In July 2018, the USFS (surface managing agency) constructed a sediment control structure in the Rilda Left Fork disturbed area. PacifiCorp will apply for a Phase III bond release of the Left Fork disturbed area. The 2017 Annual Report Map details portal closures, which we discussed during the mid-term inspection, as follows:

- McKinnon portals were sealed in 2005. McKinnon portals are within the disturbed area boundary on a terrace above and south of the paved access road.
- 9th East Grimes Wash Portals sealed 1999 (and Phase III bond release in 2011).
- North Fork Meetinghouse portals sealed Fall 2015, final reclamation was in 2016. Fire raged through this canyon and the status of the site is unknown.
- Deer Creek portals were sealed in 2015, with water flow pipe and monitoring structure installed.
- Left (South) Fork Ventilation portals sealed 2017.
- Rilda 1st Right Portals were sealed 2017, with water flow pipe and monitoring structure installed.

pburton

Operation Plan

Topsoil and Subsoil

Analysis:

the application meets the State of Utah R645 requirements for Topsoil/Subsoil Operations.

The Permittee is in compliance with the commitment to sample potential substitute soils as described on page 2-3 Section R645-301-233 of Vol2, Part 4 of the MRP, because substitute topsoil was monitored in 2002, 2010 and 2014. Substitute topsoil is fair to good in the suitability parameters as outlined in the Division's 2002 Topsoil and Overburden Guidelines.

The 2002 Analyses are found in the MRP Vol 2 Part 4 Appendix R645-301-200A. Sample locations are shown on Map DS-1810-D.

The 2010 annual report provides a map of the 12010 sample locations. Sample locations 3 and 5 were high in SAR in 2010. These locations were sampled to three feet in 2010. The 2014 annual report provided field pH and field conductivity for sample locations 3 and 4 along the road, but very little soil could be retrieved from a core of location 5 in

2014. Therefore only samples from locations 3 and 4 were analyzed in 2014 (supplemental information to the 2015 Annual Report received 8/3/2016).

In 2014, four composite samples from two locations and two depths were analyzed. Samples from location DC0114 and CD0214 representing the depth intervals 0-3ft and 3-5ft were sandy loam in texture, slightly alkaline pH, EC values of 1.71 and 6.31 dS/m and corresponding SAR values of 3.11 and 5.02. Soils from 0-5 ft depth at this sample location are suitable. The second location is represented by samples DC0314 (0-3 ft) and DC0414 (3-5 ft). These samples were sandy loam to loam in texture with alkaline pH (8.4 - 8.2), EC values of 1.5 and 4.21 dS/m, and corresponding SAR values of 10.5 and 15.3. The SAR values in samples DC0314 and DC0414 places them in the fair category for suitability.

Sampling these locations on two sample dates has shown a dramatic **decrease** in EC and SAR values over time, most likely due to the change in management practice for road de-icing.

pburton

Hydrologic Sediment Control Measures

Analysis:

The Deer Creek MRP meets the State of Utah R645 requirements for implementing the Best Technology Currently Available for Sediment Control Measures.

The Deer Creek mine is no longer in operation and is beginning reclamation at the site. Drainage at the Deer Creek facilities still reports to the sediment pond at the lower end of the site. This sediment pond has an outfall issued to it from the Division of Water Quality and the Permittee diligently reports all required discharge and water quality data for this outfall when the pond discharges. Any potential runoff from the Rilda right facilities reports to series of total containment retention basins that do not discharge.

The gravity drainage issuing from the Rilda right portals is captured in a French drain system inby the portal seals and is conveyed by pipeline down to the power plants raw water holding pond. This water is consumed in the power plant, but the Permittee also has the option to discharge this water at an outfall into Huntington creek.

The Permittee will implement pocking on all reclaimed areas. Pocking has been shown to be the BTCA for controlling runoff from reclaimed areas and preventing offsite impacts of suspend sediment.

kstorrar

Reclamation Plan

Topsoil and Subsoil

Analysis:

The application meets the State of Utah R645 requirements for Topsoil Substitutes and Supplements and Soil Reclamation Plan.

The final reclamation soil redistribution plan for the Deer Creek facility is in compliance with R645-301-242.100, because regraded refuse (substitute subsoil) will be field sampled for pH and EC (MRP Section R645-301-233 p. 2-3.) prior to placement of the substitute topsoil. Substitute topsoil will be excavated from the existing undisturbed drainage corridor. Substitute topsoil was sampled in 2002, 2009 and 2014. In 2014 soils from 0 - 5 feet had good to fair suitability (according to the Division's 2002 Guidelines) for use on the surface of the site. Substitute topsoil will be placed as shown on drawing DS-1816-D in Appendix R645-301-500C.

In Rilda Canyon subsoil will be field tested for pH and EC on 500 ft. intervals to a depth of four feet (MRP Vol. 11, Section R645-301-231.300). Fertility of topsoil will be sampled in the facilities area and sediment pond (MRP Vol 11, Section R645-301-242).

Waste rock site reclamation sampling is described in MRP Vol 10, Chap 7. p. 7-5. However, this site is being transferred to a new permit 015/0036 and new Permittee (Castle Valley Mining, LLC) .

pburton

Revegetation Standards for Success

Analysis:

The MRP does not meet the State of Utah R645-301-356 requirements for revegetation standards for success. Inspection of a mine's reference areas is to occur periodically to ensure that the selected reference areas remain indicative of the desired reclamation success standards. The midterm review process has been selected as a beneficial time to do this since it occurs regularly, every five years. A site visit was conducted on July 18, 2018 and reference areas were examined for any outside impacts that may have arisen and affected the area.

The reference areas for the Deer Creek facilities were found to be untouched by the recent forest fire and no other outside impacts were observed. The areas in Rilda Canyon, on the other hand, were severely impacted by the wildfire with most of them being destroyed. The wildfire resulted in unusual circumstances regarding the reclamation of the Rilda facilities. Due to the fear of highly-likely catastrophic flooding and debris flow, the U.S. Forest Service presented a plan that required their takeover of the Rilda Left area to install catchment basins in anticipation of the approaching monsoon season. This transfer would remove the necessity of the mine to maintain reference areas for the vegetative communities in Rilda Left because the catchment basins remove the need for revegetation. This arrangement was agreed upon by the company, the Division, and OSM.

According to the mine representatives present at the inspection, the reference areas destroyed by the fire were all for use in the reclamation of the Rilda Left area, which the mine will no longer be responsible for reclaiming. One reference area remains intact in Rilda Canyon, a pinyon-juniper/mountain brush area that the representatives state is the only area needed for the remaining reclamation work to be done in Rilda Canyon. The vegetation map provided in the MRP shows the Rilda Right pad and surrounding area being made up of Rocky Mountain juniper woodlands. Subsequent study and consultation is required to confirm that the reference area that remains is adequate to determine the standards of success for the reclamation of the Rilda Right area, which remains the responsibility of the mine.

The narrative presented in the MRP indicates that, of the 3 seed mixes provided (sagebrush/grass, white fir/aspen, and pinyon-juniper/mountain brush), "the sagebrush/grass seed mix will be used in the upper part of the disturbance. The topsoil storage area will be seeded with the white fir/aspen seed mix for interim and final vegetation. Disturbances to the white fir/aspen community, near the Rilda Canyon stream, will be seeded with the white fir/aspen seed mix. All other areas will be seeded with the pinyon-juniper/mountain brush seed mix." Based on this narrative, it is unclear where exactly the seed mixes will be deployed. For example, what constitutes the "upper part of the disturbance?" Where is the "white fir/aspen community near the Rilda Canyon stream?" Furthermore, the topsoil storage area is to be seeded with the white fir/aspen seed mix, the reference area of which was destroyed. Delineation on a map will clarify what seed mixes, and reference areas, are still required, following the changes from the fire, and where they will be deployed. At least one new reference area will likely need to be selected.

Deficiencies Details:

The MRP does not meet the State of Utah R645-301-356 requirements for revegetation standards of success. The following deficiency must be addressed:

R645-301-356 and R645-301-121: The vegetative reference area topic needs to be updated and clarified in the MRP to reflect the current plan following the effects and changes from the forest fire and USFS work. A new reference area for white fir/aspen must be identified and defined. A map must be provided that shows the location of updated reference areas, what vegetative community they represent, what seed mix they correspond to, and which areas they will be used in for reclamation. An accompanying narrative is also required to update the MRP to reflect changes made to the reclamation plan.

tmiller

Bonding Determination of Amount

Analysis:

The application does not meet the State of Utah R645 requirements for Determination of Bonding Amount.

The Deer Creek Mine stopped mining coal on January 7, 2015 due to the depletion of economically viable coal reserves within the active permit areas. Since that time, all portals have been sealed and reclamation activities have been underway ever since. Most of the demolition work at Rilda Canyon has been completed, and demolition of all of the

structures at the main mine facility is currently underway with plans to finish by November 2018.

Division records indicate the present surety bond is in the amount of \$3,374,000, held by Travelers Casualty and Surety Company of America. The most recent bonding calculations submitted by the Permittee indicate that the current bond liability amounts to \$3,381,000 - \$7,000 more than the actual bond held by the surety company. Previously, this discrepancy was overlooked by the Division under a "5% rule", which did not require operators to post additional bond if the actual posted bond was deficient by up to 5% of the calculated bonding liability. Recent rulings from the Office of Surface Mining have required that the Division abolish this practice, deeming it arbitrary and capricious.

In addition to a \$7,000 deficiency between the bond liability and the actual posted bond, one other deficiency was identified in the facilities demolition calculations within the Main Mine direct costs. Included in the list of Main Mine facilities is a page detailing the demolition costs for a "Shop Warehouse." The direct costs for the demolition of this structure were determined to be \$22,025, although that dollar amount is absent from the list of facilities to be demolished, and is also missing from Direct Costs Total.

Although the total bond liability amounts to \$3,381,000, that figure did not include demolition costs for the aforementioned Shop Warehouse, and was escalated to 2016 during the midterm review in 2011. If the missing demolition costs for the Shop Warehouse are restored to the bonding calculations and then escalated at 1.78% for the next 5 years, the total bond liability amounts to \$3,730,000. The current surety bond amount on file with the Division is for \$3,374,000, which is deficient by \$356,000. This bonding deficiency may be resolved either by posting an additional \$356,000, or by applying for bond release for the extensive reclamation work that the Permittee has recently completed.

Deficiencies Details:

The amendment does not meet the State of Utah R645 requirements for Determination of Bonding Amount. The following deficiency must be addressed prior to final approval:

R645-301-830: The current surety bond amount on file with the Division is for \$3,374,000, which is deficient by \$356,000. This bonding deficiency may be resolved either by posting an additional \$356,000, or by applying for bond release for the extensive reclamation work that the Permittee has already completed at the Main Mine site, and/or Rilda Canyon.

jeatchel