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DEPARTMENT OF NATURAL RESOURCES

BRIAN C. STEED
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Division of Oil, Gas and Mining

JOHN R. BAZA
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December 18, 2019

Corey Heaps, Mine Manager
Canyon Fuel Company, LLC
HC 35 Box 380
Helper, Utah 84526

Subject: Huntington Canyon Water Monitoring Program, Canyon Fuel Company, LLC,
Skyline Mine, C/007/0005, Task #6012

Dear Mr. Heaps:

The Division of Oil, Gas and Mining (the Division) has reviewed your application. The Division has identified deficiencies that must be addressed before final approval can be granted. The deficiencies are listed as an attachment to this letter.

The deficiencies authors are identified so that your staff can communicate directly with that individual should questions arise. The plans as submitted are denied. Please resubmit the entire application by no later than January 17, 2020. Per the Division's Submittals Format Guide, please ensure that all proposed revisions are in redline strike-out format.

If you have any questions, please call me at (801) 538-5350.

Sincerely,

Steve Christensen
Coal Program Manager

SKC/sqs
cc: Gregg Galecki, CFC
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Technical Analysis and Findings

Utah Coal Regulatory Program

PID: C0070005
TaskID: 6012
Mine Name: SKYLINE MINE
Title: HUNTINGTON CANYON WATER MONITORING PROGRAM

Summary

This permit change updates Section 2.3 of the Skyline Mine Mining and Reclamation Plan with a description of the monitoring program for the Skyline Mine, Electric Lake and Huntington drainage. This monitoring program reflects the agreement that Canyon Fuel Co., PacifiCorp, Huntington-Cleveland Irrigation Company, and the Carbon Water Conservancy District signed on December 28, 2017. The Huntington Canyon Water Monitoring Agreement has been submitted for review with this amendment and is found in Attachment 2.3-1 of this submittal.

MRP Table 2.3.7-1 Comprehensive Water Quality Analytical Schedule (Surface and Ground Water Stations), Table 2.3.7.3 Monitoring Station Identification, Table 2.3.7-4 Summary Information on Groundwater Observation Wells and Dwg 2.3.6-1 Location of Hydrologic Monitoring Stations and Drawing 2.3.6-3 Mine Inflows have been updated. Tables 2.3.7-5 PacifiCorp Well Monitoring Locations, Table 2.3.7-6 PacifiCorp Surface Monitoring Locations, Figure 2.3.7-2 Huntington Canyon Water Monitoring Program PacifiCorp Monitoring Sites have been added to the MRP.

In addition, Section 4.2 Bond Summary sheet and Well Abandonment sheet 45 has been updated for the Skyline Mine.

pburton

Operation Plan

Hydrologic Ground Water Monitoring

Analysis:

The amendment does not meet the State of Utah R645 requirements for Hydrologic: Ground Water Monitoring.

On October 31, 2019 the Permittee submitted an amendment to the Skyline MRP to revise the ground and surface water monitoring program. The revision includes incorporating portions of the Huntington Canyon Water Monitoring Program (HCWMP) into the existing water monitoring program. Included in the amendment, related to hydrology, are updates to section 2.3 of the MRP, updates to Plates 2.3.6-1 and 2.3.6-3 as well as the addition of Attachment 2.3-1. As part of the HCWMP the Permittee will be conducting monitoring that will be incorporated into their MRP's water monitoring program. PacifiCorp, one of the HCWMP parties, will also be conducting their own monitoring on sites located nearby and this data will be provided to the Division by the Permittee as a courtesy when available. Reviewing the changes to section 2.3 was difficult due to the changes not being submitted in red-line/strike-out format; there are multiple discrepancies that need to be corrected before a comprehensive review can be completed by the Division. See below for a list of a few of these discrepancies:

- Spring SW32-276 appears to have been removed from the requirements in the text regarding the Flat Canyon monitoring area (page 2-35c) as well as from Water Monitoring Plate 2.3.6-1, but remains in the requirements

listed in Tables 2.3.7-1 and 2.3.7-3. There is no justification for this removal provided.

- 10 new wells were added to Table 2.3.7-1 for continuous water level monitoring and 3 of the existing wells in the monitoring program (98-2-1, W99-4-1 and W20-28-1) will also have continuous monitoring conducted. There are some inconsistencies as to which of these wells will be monitored manually on a quarterly basis in addition to the continuous monitoring. This must be clarified by the Permittee.
- Table 2.3.7-1 changed the requirement of monitoring sustained in-mine flow threshold from >800 gpm to >200 gpm. This update also needs to be made to contradicting sections in Chapter 2, such as page 2-35b.
- Table 2.3.7-3 subsection "Wells", is not consistent with the wells listed in Table 2.3.7-1. Some of these issues are as follows; well W18-32-1S is listed twice, W18-28-1 is named W18-28-1B which is different from Table 2.3.7-1, W18-5-1B is not listed at all, and the number of well stations listed does not add up to the number reported in the table. All inconsistencies must be corrected.
- Plate 2.3.6-1 was submitted in a resolution that makes text unreadable. This map must be provided in a clearer format to enable review.

In addition to updating monitoring tables in Chapter 2, the Permittee updated section 2.3 of the MRP to include a new section entitled, "Huntington Canyon Water Monitoring Program". This section is intended to provide a description of the water monitoring agreement between parties outside of the Division. These parties include the Permittee, PacifiCorp, Huntington-Cleveland Irrigation Company, and the Carbon Water Conservancy District. This section should be updated to clearly define the following:

- How and when the Permittee will submit continuous flow/depth monitoring to the Division (i.e. quarterly spreadsheets or similar method).
- How sustained mine inflows >200 gpm sampling results and location maps will be submitted to the division and when the associated maps will be updated.

The additional monitoring that is taking place as part of the HCWMP will provide a more comprehensive view of any potential changes or impacts to the local ground and surface water systems.

Deficiencies Details:

The amendment does not meet the State of Utah R645 requirements for Ground Water Monitoring. The following deficiencies must be addressed prior to final approval:

R645-301-731.200 There are a number of errors and discrepancies in the revisions to the water monitoring Table 2.3.7-1 and 2.3.7-3 that must be corrected as well as the clarity of Plate 2.3.6-1. See the above analysis for details.

R645-301-731.212 The Permittee must clarify the text on page 2-35e to provide the following:

- How and when the Permittee will submit continuous flow/depth monitoring to the Division (i.e. quarterly spreadsheets or similar method).
- How sustained mine inflows >200 gpm sampling results and location maps will be submitted to the Division and when the associated maps will be updated.

adaniels

Reclamation Plan

Bonding Determination of Amount

Analysis:

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

The application contains several sheets that contain bonding calculations that address the costs of well abandonment. Page 23 of the submittal lists all of the wells that are to be reclaimed along with the direct unit costs to plug each well. The unit costs are subtotaled along the column on the right of the page, and the total costs to reclaim all of the wells within the permit area are listed at the bottom of the "Cost" column. A suspected arithmetic error is located here because all of the numbers in the right column should give a sum of \$19,588.32 but instead is reported as \$9794.

Deficiencies Details:

The application 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: Permittee must correct the arithmetic error on the page describing unit costs for Well Abandonment (PDF Page 23). Once corrections have been applied, the corrected totals should be added back into the Bonding Calculations Summary sheet (PDF Page 21) and escalated at 2.32%.

jeatchel