



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

April 4, 2018

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

Subject: Approval of Equipment Abandonment, Canyon Fuel Company, LLC, Skyline Mine, C/007/0005, Task #5621

Dear Mr. Heaps:

The above-referenced amendment is approved effective April 4, 2018. The Division has completed a Technical Analysis of the change and found that it meets the requirements of the Utah Coal Rules. A stamped incorporated copy of the amendment is enclosed for your copy of the Mining and Reclamation Plan.

If you have any questions, please feel free to call me at (801) 538-5325.

Sincerely,

A handwritten signature in blue ink that reads "Daron R. Haddock".

Daron R. Haddock
Coal Program Manager

DRH/sqs
Enclosure
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Technical Analysis and Findings

Utah Coal Regulatory Program

PID: C0070005
TaskID: 5621
Mine Name: SKYLINE MINE
Title: EQUIPMENT ABANDONMENT

Environmental Resource Information

Probable Hydrologic Consequences Determination

Analysis:

The amendment meets the State of Utah R645 requirements for Probable Hydrologic Consequences Determination.

The amendment proposes to abandon steel-only materials within the mine. The permittee has addressed the probable hydrologic consequences pertaining to abandoning mining equipment on page 2-51c. It is unlikely that equipment abandoning will have additional impacts, not already outlined in the MRP, on the hydrologic balance, sediment yield, acidity, TDS, TSS, streamflow, ground-water/surface-water availability, or state-appropriated water rights.

Potential for impacts from acid-or-toxic forming materials is also addressed. The abandonment will include only steel product, and all remaining materials including hoses and fluids, will be removed. The specific locations of equipment are depicted on Plate 2.5.2-1. The Permittee describes the potential for acid and toxic forming materials to influence water quality on page 2-51c. It has been found that due to the high alkalinity and low acidity concentrations in the area, acid drainage problems do not occur. The corrosion potential of the steel used in long wall mining activities was assessed by the University of Utah Metallurgy Department with findings indicating it would take thousands of years for the metal to corrode away. Furthermore, given the subsurface environment of Utah, the general conditions to allow for corrosion processes do not exist.

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Operation Plan

Spoil Waste Disposals of Noncoal Mine Wastes

Analysis:

The amendment meets the State of Utah R645 requirements for Noncoal Mine Waste Disposal.

Permittee has recently completed mining in the 8 Left through 15 Left district of Federal Coal lease UTU-67939, and is currently proposing to seal off that area. Most of the mining equipment has been removed from this area, and Permittee is now proposing that 137 conveyor pan-line sections be left underground citing safety concerns. These sections cannot be removed without endangering the lives of miners, and will therefore be abandoned. In anticipation of leaving the pan-line sections underground, all hoses and fluids have been removed. Only the steel structures will be left underground.

In 1998, a BLM commissioned study by the University of Utah focused on the corrosion potential of steel used in longwall mining systems. The results of that study concluded that it would take thousands of years for the metal in the reducing environment of a coal mine to corrode away. Consequently, it is not anticipated that the groundwater would be

contaminated by the abandoned equipment.

Plate 2.5.2-1_rev. 7 has been included in this amendment, outlining the location of the proposed equipment to be abandoned.

jeatchel

Hydrologic Ground Water Monitoring

Analysis:

The amendment meets the State of Utah R645 requirements for Hydrologic Ground Water Monitoring.

The current ground water monitoring plan is sufficient to detect water quality impacts, if any, from the abandoned equipment. The groundwater monitoring plan includes site-specific sampling for field and/or lab analysis, including oil/gas detection.

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Hydro Surface Water Monitoring

Analysis:

The amendment meets the State of Utah R645 requirements for Hydrologic Surface Water Monitoring.

The current surface water monitoring plan is sufficient to detect water quality impacts, if any, from the abandoned equipment. The surface water monitoring plan includes site-specific sampling for field and/or lab analysis, including oil/gas detection.

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Hydrologic Acid and Toxic forming Materials

Analysis:

The application meets the State of Utah R645 requirements for Hydrologic Acid and Toxic Forming Materials.

Potential for impacts from acid-or-toxic forming materials is from abandoning equipment is addressed by the Permittee. The abandonment will include only steel product, and all remaining materials including hoses and fluids, will be removed. The specific locations of equipment are depicted on Plate 2.5.2-1. The Permittee describes the potential for acid and toxic forming materials to influence water quality on page 2-51c. It has been found that due to the high alkalinity and low acidity concentrations in the area, acid drainage problems do not occur. The corrosion potential of the steel used in long wall mining activities was assessed by the University of Utah Metallurgy Department with findings indicating it would take thousands of years for the metal to corrode away. Furthermore, given the subsurface environment of Utah, the general conditions to allow for corrosion processes do not exist. In the unlikely event that corrosive materials do form in these environmental conditions, the amount of material left behind is insignificant to cause notable impacts.

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