



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

January 29, 2019

John Byars, General Manager
Canyon Fuel Company, LLC
597 South SR24
Salina, Utah 84654

Subject: South Fork Lease Modification, Canyon Fuel Company, LLC, Sufco Mine, C/041/0002, Task #5781

Dear Mr. Byars:

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.

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

Sincerely,

Steve Christensen
Permit Supervisor

SKC/sqs

O:\041002.SUF\WG5781 SOUTH LEASE MOD\Deficiencies.doc



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Technical Analysis and Findings

Utah Coal Regulatory Program

PID: C0410002
TaskID: 5781
Mine Name: SUFCO MINE
Title: SOUTH FORK LEASE MODIFICATION

General Contents

Right of Entry

Analysis:

The applicant has proposed to mine in portions of sections 11, 15, 22, and 23 of Township 21 S Range 4 E. In order to acquire the right of entry to this area, Canyon Fuel Company has made application to the BLM to modify two leases--Lease UTU-84102 (Green's Hollow lease) and U-63214 (Quitcupah lease). The total acreage to be added to the authorized mining area is 790 acres. This area is much less than 15% of the existing adjacent area authorized for mining, so it would not fall under the significant revision criteria for permitting. A determination of whether or not the change will constitute a federal mine plan action will need to be made by OSM. All mining will be done using underground methods with no disturbance at the surface. At the present time the lease modifications have not yet been approved, so the application for permitting cannot be approved. The application does not meet the requirements of R645-301-114 for right of entry, since the lease modifications are still pending with the BLM.

Deficiencies Details:

The application does not meet the requirements of R645-301-114 for right of entry, since the lease modifications are still pending with the BLM. The lease modifications must be issued in order for the permit change application to be approved.

dhaddock

Permit Application Format and Contents

Analysis:

The amendment does not meet the State of Utah R645 requirements for Clear and Concise.

The amendment appears to add the PHC for the South Fork Lease Modification as Appendix 7-17. This appendix notation is not compatible with the current format of the MRP. Appendix 7-17 already refers to the document titled, "Investigation of Surface and Groundwater Systems". The PHC appendix number in the amendment must chose an available number.

Deficiencies Details:

The amendment does not meet the State of Utah R645 requirements for Clear and Concise. The following deficiency must be addressed prior to final approval:

The amendment appears to add the PHC for the South Fork Lease Modification as Appendix 7-17. This appendix number is not available in the MRP. The PHC appendix proposing to be added to the MRP must chose an available

Environmental Resource Information

Historic and Archeological Resource Information

Analysis:

The amendment does not meet the State of Utah R645-301-411 requirements for historic and archeological resource information. A cultural resources report titled "A Cultural Resource Inventory for Canyon Fuel Company, LLC's SUFCO Mine South Fork Lease, Sevier County, Utah" is included in the confidential section of the amendment. This report was made in 2016 and concludes that no NRHP-eligible sites are within the limits of potential subsidence for the South Fork Lease Modification and therefore recommends that the project will have no effect on historic properties. Part of the amendment review process for DOGM includes consultation with involved agencies relating to cultural resources. As such, prior to approval, consultation and concurrence with the findings from the Manti-La Sal National Forest archaeologist must be made. Upon reaching a concurrence regarding the potential effect of the project, consultation with SHPO may take place seeking their concurrence with the findings.

Deficiencies Details:

The amendment does not meet the State of Utah R645-301-411 requirements for historic and archeological resource information. The following deficiency must be addressed prior to final approval:

R534-301-411: The amendment does not provide evidence of clearance by SHPO. Communication requesting consultation with the Manti-La Sal National Forest Heritage Program has been sent, but due to the federal government shutdown, that consultation has not taken place yet. Following this consultation, concurrence from SHPO can be sought. The permittee is not obligated to provide anything at this time, however, dependant on the findings of MLS-NF, DOGM, and with the concurrence of SHPO, future action may be required of the permittee prior to approval.

triller

Geologic Resource Information

Analysis:

The South Fork Lease Modifications (SFLM) are located just South and West of the Greens Hollow lease that was recently reviewed and approved for mining. The geology of the SFLM is very similar to the Green's Hollow lease. A Geology map has been provided as Plate 6-1. The general Stratigraphy of the area includes from lower to upper, the Starpoint, Blackhawk, Castlegate, Price River and North Horn formation. Geology at the surface of the SFLM is all sedimentary rock, primarily of the North Horn formation which is tertiary and cretaceous in age. There is just a very small amount of Price River formation that crops out on the west side of the SFLM.

Mining is to take place in the upper Hiawatha coal seam, where overburden ranges from 1250 feet to 2650 feet. No escarpments are found in the area. the Coal dips to the Northwest at approximately 2 degrees. Plate 6-1 shows a number of small projected faults in the area that trend NW to SE.

The maps show that there have been 4 holes drilled into the SFLM area, 13-15-2 (8903), 08-23-1 (8739), 14-22-2 (8801) and (8874), however no information or drill logs were provided. There are no cross-sections showing the nature, depth or thickness of the coal seam to be mined. It appears that all of the geological information is based on projected information from adjacent leases. This is especially true when discussing acid or toxic forming characteristics. While the original MRP discusses acid and toxic forming characteristics in section 6.2.4.3, and drill logs and chemical analyses are presented in Appendices 6-1 and 6-2, there is nothing specific to the South Fork Lease Modification area. While it is expected that the lithology of the SFLM is the same as the adjoining leases, there must be some information provided in the application that verifies this.

Deficiencies Details:

That application is does not meet the requirements of the R645-301-621 rules.

The maps show that there have been 4 holes drilled into the SFLM area, 13-15-2 (8903), 08-23-1 (8739), 14-22-2 (8801) and (8874), however no information or drill logs were provided. There are no cross-sections showing the nature, depth or thickness of the coal seam to be mined. It appears that all of the geological information is based on projected

information from adjacent leases. This is especially true when discussing acid or toxic forming characteristics. While the original MRP discusses acid and toxic forming characteristics in section 6.2.4.3, and drill logs and chemical analyses are presented in Appendices 6-1 and 6-2, there is nothing specific to the South Fork Lease Modification area. While it is expected that the lithology of the SFLM is the same as the adjoining leases, there must be some information provided in the application that verifies this.

dhaddock

Hydro Baseline Information

Analysis:

The amendment meets the State of Utah R645 requirements for Baseline Information.

The amendment provides baseline information of surface water and groundwater resources within and adjacent to the permit area. The information is included in Appendix 7-17 in narratives and tables and figures as well as in Plates 7-2, 7-3 and 7-10. Tables 1 and 2 and Figure 2 in Appendix 7-17 provide the monitoring site locations and five years of baseline monitoring quality and quantity data for each site.

kstorrar

Maps Affected Area Boundary Maps

Analysis:

The application does not meet the State of Utah R645 requirements for Affected Area Boundary Maps.

The list of Plates within the submitted application contains blue linework that represent the boundaries associated with the proposed lease modification. The Explanation at the bottom of each Plate offer a description for various symbols found within the Plate. Although the linework that illustrates the proposed lease boundary is identical in every Plate, the description for that linework in the Explanation varies and is sometimes omitted entirely. The following is a list of how each Plate describes the proposed lease boundaries in the Explanation:

Plates 5-1, 5-7, 5-10, 5-11, 6-1, 7-2, and 7-10 all aptly describe the proposed lease boundary as "Proposed Lease Boundary."

Plate 5-6 describes the proposed lease boundary as "Bonded Mitigation Area."

Plate 5-10C describes the proposed lease boundary as "SUFCO Exterior Lease Boundary."

And in Plates 2-3, 3-1, 3-2, 3-3, 4-1C, 5-5, 7-3, and 9-1 there is no description offered in the Explanation at all.

The descriptions offered in the Explanation should be consistent so as to avoid confusion when browsing between Plates.

Deficiencies Details:

The application does not meet the State of Utah R645 requirements for Affected Area Boundary Maps. The following deficiency must be addressed prior to final approval:

R645-301-521.140, R645-301-121.200 - The description for the proposed lease boundary offered in the Explanation should be consistent so as to avoid confusion when browsing between Plates.

jeatchel

Operation Plan

Subsidence Control Plan Subsidence

Analysis:

The application does not meet the State of Utah R645 requirements for Subsidence Control Plans.

The application must include a subsidence control plan that contains a description of the monitoring required to determine the degree of subsidence over the area planned for full extraction mining. Similar to other areas of the mine, subsidence control points should be established over areas that are planned for subsidence mining and detail the location of those control points on Plates 5-10 and 5-10C.

Deficiencies Details:

The application does not meet the State of Utah R645 requirements for Subsidence Control Plans. The following deficiency must be addressed prior to final approval:

R645-301-525.400: Similar to other areas of the mine, subsidence control points should be established over areas planned for subsidence mining and detail the location of those control points within the lease boundaries on Plates 5-10 and 5-10C.

jeatchel

Subsidence Control Plan Subsidence

Analysis:

Since mining will be done using longwall methods, it is expected that there will be subsidence occurring within the South Fork Lease Modification area. A map, Plate 5-10c is located in the confidential folder. It is entitled; Potential Subsidence Limits. It shows that all subsidence will be contained within the lease modification boundary. Maps showing potential subsidence are not considered to be confidential. This map also contains locations of cultural sites, which is probably why it is labeled confidential. In order to satisfy the regulatory requirements of R645-301-140 and R645-301-632, a separate map should be provided that shows the limits of subsidence and the location of subsidence monitoring points. This map cannot be located in the confidential section of the MRP.

Deficiencies Details:

The application does not meet the regulatory requirements of R645-301-140 and R645-301-632, with regard to subsidence monitoring maps.

Maps showing potential subsidence are not considered to be confidential. This map also contains locations of cultural sites, which is probably why it is labeled confidential. In order to satisfy the regulatory requirements of R645-301-140 and R645-301-632, a separate map should be provided that shows the limits of subsidence and the location of subsidence monitoring points. This map cannot be located in the confidential section of the MRP.

dhaddock

Fish and Wildlife Protection and Enhancement Plan

Analysis:

The amendment does not meet the State of Utah R645-301-322 requirements for fish and wildlife protection and enhancement. DOGM consultation with applicable state and federal agencies has not been completed at this time due to the ongoing federal government shutdown. Upon the termination of the shutdown, this consultation can take place and a full finding can be made regarding the sufficiency of the proposed amendment.

Deficiencies Details:

The amendment does not meet the State of Utah R645-301-322 and R645-301-333 requirements for fish and wildlife protection and enhancement. The following deficiency must be addressed prior to final approval:

R645-301-322: Required DOGM consultation with applicable federal and state agencies must take place and this cannot occur until the conclusion of the federal government shutdown. The permittee is not obligated to provide anything at this time, however, dependant on the findings of the consultations, future action may be required of the permittee prior to approval.

trmiller

Hydrologic Ground Water Monitoring

Analysis:

The amendment does not meet the State of Utah R645 requirements for Groundwater Monitoring.

The amendment does not propose to add groundwater monitoring sites to the baseline or operational water monitoring program at the Sufco mine. The amendment includes a un-labeled table in Chapter 7 at the end of section "7.2.4.1 Groundwater Information" of the MRP. It is unclear what is the intended purpose of this table since it includes information on both surface and groundwater resources. If the sites within this table are intended to be monitored operationally and during reclamation, they must be incorporated into Table 7-2 of the Water Monitoring Program.

Deficiencies Details:

The application does not meet the State of Utah R645 requirements for Clear and Concise. The following deficiency must be addressed prior to final approval:

R645-301-731.200, R645-301-120: The proposed amendment does not appear to add any new groundwater monitoring sites to the water monitoring program. The amendment must include operational and reclamation groundwater monitoring of spring sites within and adjacent to the lease area.

kstorrar

Hydro Surface Water Monitoring

Analysis:

The amendment does not meet the State of Utah R645 requirements for Surface Water Monitoring.

The amendment does not propose to add surface water monitoring sites to the baseline or operational water monitoring program at the Sufco mine. The amendment includes a un-labeled table in Chapter 7 at the end of section "7.2.4.1 Groundwater Information" of the MRP. It is unclear what is the intended purpose of this table since it includes information on both surface and groundwater resources. If the sites within this table are intended to be monitored operationally and during reclamation, they must be incorporated into Table 7-2 of the Water Monitoring Program.

Deficiencies Details:

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

R645-301-731.200, R645-301-120: The proposed amendment does not appear to add any new surface water monitoring sites to the water monitoring program. The amendment must include operational and reclamation surface water monitoring sites within and adjacent to the lease area.

kstorrar

Maps Monitoring and Sampling Locations

Analysis:

The amendment meets the State of Utah R645 requirements for Monitoring and Sampling Location Maps.

The amendment provides Plate 7-10 as the monitoring and sampling location map for the South Fork Lease Modification. The proposed water monitoring sites are shown on the map. Also included on the map is the proposed lease boundary and the orientation of the three panels that will be mined within the lease modification.

kstorrar

Reclamation Plan

Mine Openings

Analysis:

The South Fork Lease Modification area will be mined using longwall mining methods. It will be accessed from the existing mine works. No new surface disturbance is planned for this area and no mine openings will be left. No exploration holes or boreholes are planned to be left open. The application meets the requirements of R645-301-631 with regard to Permanent Casing and Sealing of Exploration holes and Boreholes.

dhaddock