

April 4, 2003

Dan Meadors, General Manager
Canyon Fuel Company, LLC
HC 35 Box 380
Helper, Utah 84526

Re: Well Drilling and Completion Amendment, Canyon Fuel Company, Skyline Mine, C/007/005-AM03C, Outgoing File

Dear Mr. Meadors:

The above-referenced amendment has been reviewed and is hereby approved. A stamped incorporated copy is enclosed for your copy of the Mining and Reclamation Plan (MRP). A copy of the Technical Analysis is also enclosed.

Please be aware that due to the extremely tight timeframe associated with this amendment, we have not had time to fully complete our coordinated review process with other agencies. During the completion of our review process, if we are made aware of other necessary requirements, we will forward them to you. You should also understand that this approval covers only the drilling and completion of the JC-3 well and does not provide for the operation of the well. We are expecting another amendment that addresses the operation of the well and also discusses the probable hydrologic consequences associated with pumping the James Canyon wells. Thank you for your help with this permitting action. If you have any questions, please feel free to call me at (801) 538-5325.

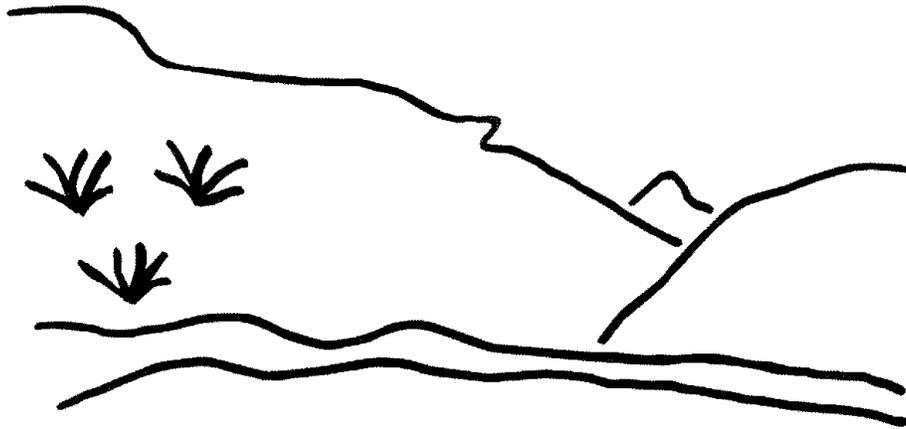
Sincerely,

Daron Haddock
Permit Supervisor

an
Enclosure

cc: Ranvir Singh, OSM
Jim Kohler, BLM
Forest Supervisor, USFS
Mark Page, Water Rights w/o
Dave Ariotti, DEQ w/o
Derris Jones, DWR w/o
Price Field Office
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State of Utah



Utah Oil Gas and Mining

Coal Regulatory Program

Skyline Mine
Drilling and Completion Project
C/007/005-AM03C
Technical Analysis
April 4, 2003

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TECHNICAL ANALYSIS

TECHNICAL ANALYSIS

The Division ensures compliance with the Surface Mining Control and Reclamation Act of 1977(SMCRA). When mines submit a Permit Application Package or an amendment to their Mining and Reclamation Plan, the Division reviews the proposal for conformance to the R645-Coal Mining Rules. This Technical Analysis is such a review. Regardless of these analyses, the permittee must comply with the minimum regulatory requirements as established by SMCRA.

Readers of this document must be aware that the regulatory requirements are included by reference. A complete and current copy of these regulations and a copy of the Technical Analysis and Findings Review Guide can be found at <http://ogm.utah.gov/coal>

This Technical Analysis (TA) is written as part of the permit review process. It documents the Findings that the Division has made to date regarding the application for a permit and is the basis for permitting decisions with regard to the application. The TA is broken down into logical section headings which comprise the necessary components of an application. Each section is analyzed and specific findings are then provided which indicate whether or not the application is in compliance with the requirements.

Often the first technical review of an application finds that the application contains some deficiencies. The deficiencies are discussed in the body of the TA and are identified by a regulatory reference which describes the minimum requirements. In this Technical Analysis we have summarized the deficiencies at the beginning of the document to aid in responding to them. Once all of the deficiencies have been adequately addressed, the TA will be considered final for the permitting action.

It may be that not every topic or regulatory requirement is discussed in this version of the TA. Generally only those sections are analyzed that pertain to a particular permitting action. TA's may have been completed previously and the revised information has not altered the original findings. Those sections that are not discussed in this document are generally considered to be in compliance.

INTRODUCTION

INTRODUCTION

The Division of Oil, Gas, and Mining (Division) received the above-cited amendment to the Skyline Mine and Reclamation Plan (MRP) from Canyon Fuel Company (CFC) on April 1, 2003. The amendment proposes to modify the currently approved MRP to include the drilling and completion of a mine dewatering water well (JC-3). The well will be located on the existing James Canyon well pad. The JC-3 well is anticipated to produce approximately 4700 gallons/minute of mine water when completed. The current technical analysis addresses only issues related to the physical installation and development of the well. A technical analysis addressing the potential impacts due to the operation of the well will be conducted in separate review. Disciplines germane to the current review include Engineering (bonding), Hydrology (well installation and development), and Biology (sensitive species).

The amendment may be approved with the following condition:

All mining activities on the surface are restricted in James Canyon May 15 to July 5. Should maintenance of the wells or other activities be required in James Canyon, the Permittee (including PacifiCorp as operator of the well) must contact the Division for permission to enter the area.

ENVIRONMENTAL RESOURCES INFORMATION

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

HYDROLOGIC RESOURCE INFORMATION

Regulatory Reference: 30 CFR Sec. 701.5, 784.14; R645-100-200, -301-724.

Analysis:

Probable Hydrologic Consequences Determination

The current amendment addresses the installation and development of the well only. Potential impacts to the hydrology due to surface disturbance do not exist because the well is being constructed on an existing well pad. The operation of the well will be addressed under a separate amendment.

Findings:

Information provided adequately addresses the minimum requirements of the Hydrologic Resources Information section of the regulations.

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April 4, 2003

ENVIRONMENTAL RESOURCE INFORMATION

OPERATION PLAN

OPERATION PLAN

FISH AND WILDLIFE INFORMATION

Regulatory Reference: 30 CFR Sec. 784.21, 817.97; R645-301-322, -301-333, -301-342, -301-358.

Analysis:

Goshawks did nest in 2002 in the James Canyon/Burnout Canyon ridge area (Phone conversation with Rod Player, Forest Service Biologist, on 3/2/02 with Susan White). A dawn protocol survey is generally performed for a half hour at daylight during March and April to determine goshawk presence. This survey was not done for the JC-3 drilling and activities were not restricted in March. In the future, all activities in the James Canyon area should be curtailed beginning March 1 until a goshawk survey can be conducted.

The mouth of James Creek is critical to the Yellowstone cutthroat trout spawning. Road use for drilling activities could cause increased sedimentation to James Creek. Continued maintenance of the road especially during snowmelt is essential during this time of year.

The James Canyon area is within a critical elk calving area. All mining activities on the surface are restricted in James Canyon May 15 to July 5. Should maintenance of the wells or other activities be required in James Canyon, the Permittee (including PacifiCorp as operator of the well) must contact the Division for permission to enter the area. The Division will consult with DWR and the Forest Service to determine if and under what conditions entry will be allowed.

Findings:

Information provided in the application meets the minimum Fish and Wildlife Resource Information requirements of the regulations. Approval of AM03A should be conditioned with the above noted restrictions.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

General

Groundwater Monitoring

Tables 2.3.7-1 (Comprehensive Water Quality Analytical Schedule – Low Summer Flow) and 2.3.7-2 (Abbreviated Water Quality Analytical Schedule – High Spring and Late Fall) have been modified to include well JC-3. This is in addition to the water quality analysis required under the UPDES permit.

JC-3 is not being sampled for age-dating analysis due to the mixed sources of the water being discharged. The water being discharged, a mixture of water derived from numerous sources within the mine, is being compromised for age-dating analysis by the time they reach the discharge area. However, mine in-flows encountered in the 11 Left, 12 Left A, and 12Left B panels (Figure 2 sites E through G, respectively – October 2002 PHC Appendix F) will be analyzed for an age-date, and reported on a quarterly frequency as long as they remain accessible. The sites located in the 11 and 12 panels are the primary/significant sources of in-flows currently encountered in the mine. CFC commits to continued age-analysis as long as sustained significant inflows continue (Pg. 2-35c).

The combined monitoring of JC-1 (screened from below the mine workings) and in-mine flows sampled at their source adequately addresses the age-dating characterization requested by the Division.

Acid- and Toxic-Forming Materials and Underground Development Waste

Water in contact with the mine workings has been isolated, and communication with other water zones has been avoided through the construction design of the well. Well construction designs (Plate 3.2.11-A, C-3, Vol.2) indicates 25-feet of grout will be emplaced between the well casing and the bedrock above the mine workings. This grout will act as a seal of water located within the mine workings, and minimize any potential contamination of groundwater located above. The well construction designs also indicate that grouting of the bedrock below the coal seam may occur as an option during construction. Otherwise, plugging of the well will be conducted during abandonment as outlined in Section 2.2.11 (Pg. 21a ‘Plans for Casing and Sealing Holes’) of the MRP.

Water-Quality Standards And Effluent Limitations

The water quality standard and effluent limitations are outlined in the PacifiCorp Minor Industrial UPDES permit. The water quality standards and effluent limitations are industry

OPERATION PLAN

standards with the exception of Total Dissolved Solids (TDS), which will have an upper limit of 242 mg/l.

The following quote from the MRP (Pg. 3-63(b)) adequately addresses the status of documenting the UPDES permit discharge records: “While Skyline Mine remains the SMCRA permittee and operator regarding the installation and operation of the JC-3 well, Pacificorp has chosen to be the holder of the UPDES permit for the discharge of mine-water from the well. Skyline will obtain from Pacificorp, and provide to the Division, the monthly UPDES DMR records for this well discharge”.

Discharge of water from both well JC-3 and well JC-1 and will be conveyed through a 16-inch HDPE pipe to Electric Lake. The combined discharge of JC-1 and JC-3 will be 8,600 gpm (3,900 gpm and 4,700 gpm, respectively), which is well below the 10,300 gpm carrying capacity of the pipe (Pg. 3-63(b)).

Findings:

Information provided adequately addresses the minimum requirements of the Operation Plan – Hydrologic Information section of the regulations.

SIGNS AND MARKERS

Regulatory Reference: 30 CFR Sec. 817.11; R645-301-521.

Analysis:

Markers outlining the disturbed area boundary have been provided to the site previously with the installation of wells JC-1 and JC-2 on the site. No additional information is necessary.

Findings:

Information provided adequately addresses the minimum requirements of the Operation Plan – Signs and Markers section of the regulations.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Mining Facilities Maps

No modification to the mining facilities map was necessary because the drill pad site already existed with the installation of wells JC-1 and JC-2. Plates 1.6-3 and 1.6-3A – Permit Area maps are referenced for the site location of the JC-well pad site within the permit area. Plate 3.4-1 is referenced to provide a more detailed illustration of construction within James Canyon.

CFC has provided more detailed information than is typically required with Plate 3.2.11-A, Sheets C-1 through C-4. These plates provide detailed illustrations of the construction of the well (JC-3), pump installation, and piping leading from the well complex (JC-1, JC-2, and JC-3) to the discharge point in Electric Lake.

Monitoring and Sampling Location Maps

Plate 2.3.6-1 (Location of Hydrologic Monitoring Stations – Volume 1B) has been modified to include well JC-3; essentially the same site as well JC-1.

Certification Requirements

All map, plan, and cross section modifications have been stamped, signed, and dated by David E. Hansen, Registered Professional Engineer #171930(State of Utah).

Findings:

Information provided adequately addresses the minimum requirements of the Operation Plan – Maps, Plans, and Cross Sections of Mining Operations section of the regulations.

RECLAMATION PLAN

RECLAMATION PLAN

GENERAL REQUIREMENTS

Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR Sec. 784.13, 784.14, 784.15, 784.16, 784.17, 784.18, 784.19, 784.20, 784.21, 784.22, 784.23, 784.24, 784.25, 784.26; R645-301-231, -301-233, -301-322, -301-323, -301-331, -301-333, -301-341, -301-342, -301-411, -301-412, -301-422, -301-512, -301-513, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-533, -301-534, -301-536, -301-537, -301-542, -301-623, -301-624, -301-625, -301-626, -301-631, -301-632, -301-731, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-732, -301-733, -301-746, -301-764, -301-830.

Analysis:

Well JC-3 is a mine-dewatering well and the reclamation standards currently supplied in the MRP are adequate. Information addressing 'Plans for Casing and Sealing Holes' is outlined in Section 2.2.11 (Pg. 21a) of the MRP.

Findings:

Information provided adequately addresses the minimum requirements of the Reclamation Plan – General Requirements section of the regulations.

BONDING AND INSURANCE REQUIREMENTS

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

Analysis:

Form of Bond

The form of the bond will not change because the amount of the bond will not change. The amount of the bond exceeds the amount of the reclamation cost estimate calculated by the Division.

Determination of Bond Amount

The Division calculated the reclamation cost estimate for the Skyline Mine based on the addition of the reclamation cost to plug the JC wells, 2003 cost data and escalating the bond to 2004 dollars (midterm.) The current bond amount is \$5,076,000. The Division calculated the new reclamation costs to be \$4,695,000 in 2004 dollars.

Findings:

The information in the amendment adequately addresses the minimum requirements of the Reclamation Plan - Bonding and Insurance Requirements section of the regulations.

CHIA

CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT (CHIA)

Regulatory Reference: 30 CFR Sec. 784.14; R645-301-730.

Analysis:

No hydrologic impacts are associated with the installation of well JC-3, which uses surface facilities previously constructed for wells JC-1 and JC-2. The potential impacts due to the operation of well JC-3 will be addressed in a future amendment.

Findings:

Information currently in the MRP adequately addresses the minimum requirements of the Cumulative Hydrologic Impact Assessment section of the regulations.