0050

Document Information Form

Mine Number: C/007/005

File Name: Outgoing

To: DOGM

From:

Person N/A

Company N/A

Date Sent: APRIL 10, 1987

Explanation:

PERMIT RENEWAL DETERMINATION OF COMPLETENESS.

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Permit Renewal
Determination of Completeness

Utah Fuel Company
Skyline Mine
ACT/007/005
Carbon County, Utah

April 10, 1987

General Comments - DL

1. "Part 1 - Legal, Financial Compliance Information," should be reformatted to follow and address the information requirements of UMC 782 in the same order as each pertinent regulation.

UMC 782.13 Identification of Interests - DL

Map 1.6-1 entitled "Skyline Mines Ownership-Carbon & Emery Counties" does not clearly define the permit area boundary as required by 783.24(b). In addition, there are a number of different types of lines used which are not in the map's legend, this makes reading the map difficult and confusing. The map must be redrawn to clearly comply with UMC 783.24(a) & (b).

(a)(2) The applicant must clearly state who the legal or equitable owner(s) of record of the surface area to be affected by surface operations and facilities is and include their address.

(a)(4) The applicant must state whether or not, there are any purchaser(s) of record under a real estate contract of areas to be affected by surface operations and facilities.

(c) The applicant must provide the information required by this regulation for all owners and purchasers included in the applicants response to comments regarding UMC 782.13(a)(2) and (a)(4).

(d) The applicant must identify all current and all previous coal mining permits held in the United States subsequent to 1970. The information shall be listed by permit or application number and identify the regulatory authority for each of those coal mining operations.

(e) Hellenic Orthodox Church, Ward W. Derry berry, Leon Nicolaides and the Utah Railroad are all shown on Map 1.6-1 as being owners of record of surface areas contiguous to the proposed permit area. However they are not listed on Page I-15 of the PAP. The applicant must include their names and addresses in the text.

(g) The applicant must provide a legal description of the area discussed on page 1-17 of the PAP.

UMC 782.14 Compliance Information - DL

(c) The applicant must provide all information required by this section.

UMC 782.15 Right of Entry and Operation Information - DL

(a) The applicant must provide descriptions and dates of all documents which convey right of entry, for all portions of the permit area. Of particular concern are those areas owned by the United States Forest Service, Marakis et al, and Nicolaides, et al.. Legal descriptions of each area must accompany the information requested.

UMC 782.21 Newspaper Advertisement and Proof of Publication - DL

The applicants announcement must include the applicants business address.

UMC 783.19 Vegetation Information - LK

Map 2.7.1-2 shows a Riparian reference area near the mouth of Eccles Canyon. Baseline vegetation data for this reference area could not be located in Appendix Vol. A-2, however, a supplement prepared by Welsh and Murdock (December 1981) which contains adequate cover and productivity data (no woody plant density data) was found in the DOGM files. This report needs to be included in Appendix Vol. A-2.

Total cover as presented in the vegetation summaries for the Aspen, Spruce/Fir and Sagebrush reference areas is apparently a summation of cover by species, which does not account for species overlap, which has resulted in total cover values in excess of 100%. Since it is impractical to use this data to make comparisons with monitoring data from interim revegetation or from areas involved in modifications (to justify using the same reference area), it will be necessary to resample the Aspen, Spruce/Fir, and Sagebrush reference areas for total cover. This should be done during the 1987 sampling season. Also, woody plant density data is lacking from the Sagebrush and Riparian reference area. This information should also be collected this year.

The applicant needs to provide documentation regarding the current range condition of all reference areas, preferably in the form of a letter from the U.S. Soil Conservation Service (SCS).

While the vegetation studies performed by Welsh and others indicates that individual transects were permanently marked with metal stakes, the MRP needs to describe how each reference area is permanently marked in the field.

Page 4-38 in the MRP appears to indicate that new reference areas will be established in the future. Will these replace the currently proposed reference areas? Are the reference areas shown on Map 2.7.1-2 only proposed reference areas that were not sampled during the original vegetation survey? Please clarify.

UMC 783.20 Fish and Wildlife Resources Information - LK

The Division is aware of two wildlife studies performed by the Company that need to be included in Appendix Vol. A-2. They are:

1. Presence and Utilization of Eccles Canyon by Elk, Mule Deer and Moose (December 1981) by H.D. Smith, C.L. Pritchett, M. Oveson and E. Robey.

2. Utah Division of Wildlife Resources Report on the History of Impacts and Recovery from Mining Related Activities on Eccles Creek. Unpublished (available from the Price Office, UDWR).

UMC 783.21 Soil Resources Information - JSL

The portal surface facilities soil survey map found in the Skyline Project Supplement Soils Report, supplement to Soils and Vegetation, Appendix A-2, does not correspond to the Portal Yard Soil Survey, Plate 2.11-1, Vol. 1 and Map D of the Soils and Vegetation section of Appendix A-2. These two plates must correspond to each other. The applicant has included various soil profile descriptions for the rock waste disposal area. However, no soil map was included. Please submit.

UMC 783.24-.25 Maps: General Requirements; Cross Sections, Maps, and Plans - JRH

Maps showing permit and disturbed area boundaries should have the respective acreages on them. The revegetation drawings do not show acreages for each treatment. This general information is extremely helpful in reviewing the mining and reclamation plan and in determination of the bond amount. The operator shall be required to provide as an exhibit to the bond, a map delineating the affected area(s) and include the acreage of those areas delineated on the map.

UMC 783.25 Cross-Sections, Maps, And Plans - JSL

Page 4.3, Section 4.11 of Volume 3 inadvertently refers to Map 3.2.8-2 for final contours of the rock disposal site. Map 3.2.8-2 contains the rock waste disposal area cross-sections, not final contours. Please amend.

UMC 783.25 Cross-Sections, Maps and Plans - DC

The operator has not addressed this section.

The operator must submit cross-sections, maps and plans showing the location and extent of sub-surface water within and adjacent to the permit area, including the areal and vertical distribution of aquifers and portrayal of seasonal differences in head in different aquifers.

UMC 784.13 Reclamation Plan: General Requirements - JRH

The operator needs to provide reclamation drawings showing the location and function of sediment control structures for both Phase I and Phase II reclamation. These drawings shall depict the drainage control upon the completion of earthwork and regrading of the site and shall also show the location of such sediment control structures as required during reclamation construction such as berms, straw bales and silt fences. The operator also needs to show the final drainage configuration throughout the facilities as well as the configuration of those areas such as sediment ponds and diversion ditches which would be removed upon successful revegetation of the site.

UMC 784.13 Reclamation Plan: General Requirements - LK

(b)(5) The applicant needs to identify the rate of straw mulch to be used on slopes between 10h:1v and 3h:1v and how the mulch will be anchored. The applicant needs to identify what type and rate of mulch will be used on slopes less than 10h:1v, and how it will be anchored, as well as the type, rate, etc. for mulching the "steeper slopes" (see page 4-35).

From the climatological data presented, the extended liability period for the portal area would be 5 years. The extended liability period for the waste rock disposal area would be 10 years. The post-revegetation monitoring plan for each site should reflect the proper 5 or 10 year period. The monitoring plan should also identify what type of data will be collected during each sampling period, the sampling methodology, sample size or statistical confidence level to be achieved, and must include sampling of the approved reference areas and the revegetated areas for the last two years of the liability period for the required parameters, at the required statistical level (see UMC 817.116 - .117).

The Division is aware of current planning to develop a revegetation field trial to determine the most feasible way to reclaim steep slope areas. This plan should be referenced in the MRP and incorporated into the MRP once it is finalized.

UMC 784.13 Reclamation Plan: General Requirements - RS

(b)(1) The reclamation timetable given in Table 4.2-1 schedules sedimentation pond back fill as occurring concurrently with general site regrading and facility removal in the year 2016. UMC 817.46 requires that the sedimentation pond be left intact until the regraded area meets revegetation requirements and drainage limitations. The Table should reflect a reclamation plan for both the portal area and loadout area ponds that is in compliance with this requirement. Additionally, the table should reflect monitoring of the drainage for the site during the period between regrading and revegetation work and final removal of the sedimentation ponds.

UMC 784.14 Reclamation Plan: Protection of Hydrologic Balance - RS

This regulation requires that a plan is submitted that protects the rights of present users of surface and ground water (subsection (a)(2)). The application contains information relative to water users in the area current to 1979 (page 96, Volume A-6). The application should update this information to be current with this permit term.

UMC 784.14 Reclamation Plan: Protection of the Hydrologic Balance - DC

The operator has not adequately addressed this section in order to be determined complete. A discussion of the effects on the surface and ground water systems due to encountering and discharging water made in the mine must be included. A copy of the OSM prepared Guidelines for Preparation of a Probable Hydrologic Consequences Determination is available at the Division offices for the operator's use. It is recommended that the operator review these guidelines as part of the PHC preparation.

UMC 784.16 Reclamation Plan: Ponds, Impoundments, Banks, Dams, and Embankments - RS

(a)(1)(i) Plates 3.2.1-2B, 3.2.1-4, and 4.16.1-1A should be certified by a registered professional engineer.The general plan for the sedimentation ponds must be certified as required under this part.

(a)(1)(ii)The cross-sections depicted on plate 3.2.1-4 should be located on Plates 3.2.1-3. The cross-sections for both the load out and portal area ponds should depict the following elevations with numerical values: top of embankment, sediment storage volume, 10 year- 24 hour runoff event volume, elevation of decant structures, primary and emergency spillway elevations, elevation of 25 year- 24 hour (or larger) runoff event flow level, elevation of junction of spillway riser and barrel, and elevation of spillway outlet.

UMC 784.19 Underground Development Waste - JRH

The operator has incorporated the waste rock disposal facilities into the mining and reclamation plan. The reclamation plan for the rock waste disposal facilities does not include the drainage control location and design for the reclamation of the facility. The operator needs to include this information in the reclamation plan.

UMC 784.19 Underground Development Waste - DC

The operator has addressed this section in terms of the scarcity of hydrologic data in the area. Further review by the Division concerning hydrologic connection between ground water below the site and Pleasant Valley Creek will be contingent on the clarification of the acid- and toxic-forming analyses as requested in UMC 817.48.

UMC 784.20 Subsidence Control Plan - DD

Multiple seam and maximum extraction mining can cause caving fractures which may intercept groundwater storage and interrupt the natural movement and supply of water to springs. This situation is compounded when the area to be mined already exhibits fracturing and faulting. According to the information presented in the Mining and Reclamation Plan (MRP) these features exist at the Skyline Mine.

Groundwater interception and mine discharge will most likely increase proportional to a mine expansion. Under this concept, groundwater naturally flowing westward and northward to discharge sources in Huntington and Winter Quarters Canyon could be intercepted and discharged into Eccles Creek. The applicant needs to discuss mitigation measures intended to be used to maintain the hydrologic balance.

To help determine the effects of mining on the groundwater regime due to subsidence the applicant needs to supply an inventory of all springs in and adjacent to the areas to be mined.

The applicant will also need to provide mining sequence maps for each seam to be mined during the next five (5) year permit term. The maps shall indicate the dates mining will occur and the type of mining method to be used.

Increased mine discharge can influence the channel and ecosystem of the receiving stream.

The applicant should discuss these changes and provide mitigation measures to protect against deterioration of the stream channel and aquatic fauna.

UMC 784.21 Fish and Wildlife Plan - LK

The applicant needs to provide a more detailed drawing of the proposed overland conveyor at the wildlife crossing points, showing the clearance (height and width) beneath the conveyor. Plate 3.2.3-2 Typical Conveyor Alignment & Cross Section needs to show the location of the planned wildlife crossings. It is requested that this map be at a scale of 1"=1000' or larger.

UMC 786.11 Public Notices of Filing of Permit Applications - DL

(a)(2)(ii) The applicant's proposed announcement only describes the legal boundaries of the lease area and the Scofield disposal site. The applicant's announcement must provide a legal description of the entire permit area, which should include at a minimum the lease area, conveyor corridor, loadout facilities, and Scofield Waste Rock Disposal Site.

(a)(5) The announcement must include information regarding mining within 100 feet of the outside right-of-way of a public road, as per UMC 786.11(a)(5).

TECHNICAL DEFICIENCIES

UMC 800 Bonding - JRH

The bonding estimate provided by the operator does not account for the detailed revegetation requirements of the mining and reclamation plan. In order to accept the bonding estimate, the Division shall revise the revegetation section of the cost estimate and other such sections of the reclamation cost estimate as necessary in order to determine the current bond amount required by the operator for the permit term. This determination of the bond amount shall be made by the Division upon incorporation of any further changes or revisions to the reclamation plan required in this review.

The operator shall be required to provide a map of the affected area which includes the perimeter of the affected areas(s) and the acreages for each respective area or the operator shall have to provide a detailed legal description of the affected area in order to satisfy the requirements for Exhibit "A" to the bond.

UMC 817.43 Hydrologic Balance: Diversion and Conveyance of Overland Flow, Shallow Ground Water Flow and Ephemeral Streams - DC

The operator has not adequately addressed the ICR comments under this section. Additionally the operator has stated that the provisions of UMC 817.43 apply only to overland flow from undisturbed areas and not to the disturbed area storm and snow melt drainage system. The Division considers that the provisions of UMC 817.43 do apply to disturbed diversions. UMC 817.43 states:

> "The following requirements shall be met for all diversions and all collection drains that are used to transport waters into water-treatment facilities and all diversions of overland and shallow ground water flow and ephemeral streams."

Therefore, the requirements of UMC 817.43 must be met for all diversions, disturbed and undisturbed, at the mine site, the loadout area and the rock disposal area. However, the Division will limit its review of the internal disturbed area drainage system to the major collection ditches that divert runoff into the pond and will not require complete designs for all tributary or feeder ditches.

It is imperative that the operator submit a map that clearly delineates the entire internal drainage system, including labeling of each diversion, for the mine area and the loadout area. The following comments will apply to the major collection ditches at the mine site area and the loadout area.

A map(s) of the area draining to each diversion must be submitted. The map(s) must depict the controls that delineate the areas (i.e., berms, topographic, etc.), disturbed versus undisturbed areas, and location and label of each diversion. The map should be of a topographic scale that is sufficient to determine elevation change and hydraulic length;

A cross section for each diversion and each section of diversion that varies in configuration must be submitted;

Designs for each diversion must be submitted. Specifically, a peak flow for the design event for each diversion must be submitted. All input assumptions (i.e., CN, precipitation, watershed area etc.) and all calculations must be included. From the design discharge for each diversion the operator must calculate and present the design velocity and channel capacity. All diversions that will experience erodible velocities at the design discharge must be lined and protected to prevent erosion. All channel lining designs must be submitted for review. These designs must include all input assumptions (e.g., Manning's n, area, slope etc.) and subsequent calculations for a stable channel lining.

The above comments must be addressed by the operator for all of the undisturbed diversions at the mine site and loadout area. The information submitted by the operator on page 3-25 concerning the amount of runoff observed in the minesite undisturbed diversion channels over the past seven years is certainly useful. This information will be reviewed along with the designs submitted in response to comments above. If the existing diversion channels do not meet the requirements of UMC 817.43, the observed site specific data may help in the granting of a variance to the regulation.

The operator must still submit a map of the watershed area draining to the waste rock disposal undisturbed diversion and a design for a stable channel lining since the predicted design velocity (V=6.0 fps) is capable of eroding an earthen channel.

UMC 817.44 Hydrologic Balance: Stream Channel Diversions - DC

The operator has included some design information for the diversion of the three forks of Eccles Creek under the pond in Appendix A-3. However, the comments made pertaining to this section in the ICR review have still not been addressed. These comments must be addressed by the operator in order for the plan to be determined complete. Specifically, the operator must submit:

A map of the area draining to each culvert must be submitted. The map must depict the controls that delineate the areas, the location and label of each diversion, and delineate disturbed versus undisturbed areas. The map should be of a topographic scale that is sufficient to determine elevation change and hydraulic length.

Designs for each culvert must be submitted. Specifically, a peak flow for the design event with all input assumptions and calculations must be submitted. The operator must demonstrate that the culverts are capable of passing the design event runoff. From the design discharge the operator must calculate and present the exit velocities out of the culverts. If exit velocities are erodible, designs must be submitted for energy dissipators at the culvert outlets.

Additionally, the Table of Contents in Volume 1 states that Figures 4.19.5-B and 4.19.5-A are located as pages 4-90 and 4-91 respectively. These figures cannot be found on the indicated pages. Please clarify.

The operator has submitted additional information on the reclamation of the three forks of Eccles Creek in Section 4.19.5. However, the operator has still not addressed the ICR comments. These comments must be addressed in order to determine this section complete. Specifically, the operator must address the following:

The combination of channel, back and flood plain configuration must be adequate to pass the peak runoff of a 100-year, 24-hour precipitation event. The operator must collect and submit information on the existing channel above and below the diversions. Such information must include the longitudinal profile of the existing channel, cross-sections of existing and proposed channel and flood plain, photo documentation of pre-existing channel, documentation of pre-existing critical habitat sections as determined in consultation with Division hydrologist and biologist, and upstream and downstream cross-sections and hydrologic parameters (Mannings inputs) to demonstrate equal channel capacity through the diverted reach. The operator must also demonstrate that the reclaimed channels will pass the design flow in an environmentally acceptable manner. This demonstration must include a backwater analysis for any channel sections steeper than ten percent, energy dissipators and channel stability and fish habitat and passage if any fish are present.

The operator must also submit designs for the reclamation of the channel adjacent to the rock disposal area.

UMC 817.46 Hydrologic Balance: Sedimentation Ponds - RS

The following deficiencies in the designs for the portal surface facilities sedimentation pond must be addressed:

1. Plate 3.2.1-1 should clearly depict each drainage control that delineates the disturbed area boundary (i.e. diversion, berm, swale, topographic control, etc.)

2. A stage-volume curve including supporting calculations for the pond must be submitted.

3. On March 24, 1987 a memorandum was submitted to the State of Utah's Attorney General's office concerning the interpretation of UMC 817.46 (c) relative to mine discharge into a sedimentation pond. Until an opinion is received from that office the following comments from the previous review cannot be addressed. The applicant will be informed of the results of the opinion as soon as they are available.

   Page 3-18 discusses the average inflow to the pond from mine water discharge. The applicant should submit data demonstrating the volume of water pumped from the mine. The Division considers the average mine water inflow discussed under UMC 817.46 (c) to be based upon the 24 hour or daily average. This decision is based upon the intent of the design criteria for sedimentation ponds. The pond design is based upon a 24 hour detention time. Clearly, when a 30 day average is used to design the pond, extreme values in that period could result in significantly deficient pond volume during any given 24 hour period. The worst case scenario could be a large volume of mine water pumped to the pond in a short period with little or no mine water pumped during the remainder of the 30 day period. The average inflow would still be within the 30 day average limit, but the pond would not have sufficient theoretical volume to treat a 10 year - 24 hour precipitation event.

   The applicant must submit a monitoring and maintenance plan to be used to determine and control the maximum volume of water pumped to the sediment pond during a 24 hour period.

4. The applicant discusses the correlation between mine water produced and mine production (Figure 4.11.4-A). The application has updated this analysis to include data collected to date. The Division is requesting inclusion of the actual data used for the development of Figure 4.11.4-A in order to aid in the development of the CHIA document for the mine site and determination of expected mine water production during this permit term.

5. The application must submit design details for the spillway system. These include:

    a. Peak flow determination(s) referenced on Page 3-18 should include assumptions (including references): time of concentration calculation (reference inputs to appropriate map), storm distribution (the SCS type II should be used for this area).

    b. A stage-discharge curve must be included to demonstrate the requirements of UMC 817.46 (g) and (i). This curve must be supported by methods and calculations (including input values) used to determine curve. These include elevation of junction of riser and barrel, elevation of spillway outlet, coefficient of pipe inlet, n-value for pipe or type of pipe, dimensions of all pipes (length), values of K_e, K_f, K_b. The proposal must include maximum expected mine water discharge rate in the design calculations.

6. The elevation of the decant device must be depicted. The application should demonstrate the decant system will have a discharge rate sufficient to meet the required detention time. If the pond is a total containment design, a commitment to only dewater the pond following a 24 hour detention time for all runoff events will be acceptable.

7. A certification statement that the ponds were constructed as proposed or certified drawings of the as-built structures must be submitted.

8. The postmining monitoring plans (related discussion in sections 4.11.2, 2.3.7, and 2.4.5) should incorporate a monitoring plan proposed to determine the quality of the drainage entering the sedimentation pond. UMC 817.46(u) requires that the pond remain in place until the drainage entering the pond meets applicable limitations. Page 4-51 of volume 3 state that no monitoring of the drainage entering the pond is planned. The Division feels that a

monitoring plan is the most viable means of determining compliance with this regulation. The plan should include monitoring points, methodology of sampling, frequency of sampling, and a commitment to sample parameters required by State and Federal regulations at the time of reclamation.

9. The application must include a certified inspection of the pond according to UMC 817.46 (h) and a certification statement as required by UMC 817.49 (h).

The following deficiencies must be addressed for the loadout facility area sediment pond:

1. Plate 3.2.1-3 depicts the sediment pond and several drainage controls that delineate the drainage area for the pond. However, the hill slope drainage to the south of the site is unclear. The applicant should update this plate to include the drainage controls in this area. If this area drains to the pond, the calculations for the design sediment volume must include a predicted sediment volume from this area.

2. The applicant should submit the contour map and/or calculations used to determine the stage-volume curve presented on Plate 3.2.1-4.

3. Elevations for the sediment storage volume, clean out level, decant structure should be given in the application. Depicting these elevations on map 3.2.1-4 will adequately address this requirement.

4. Designs for the spillway system must be submitted. These include the following:

   a. Calculation of design flow events with assumptions.

   b. The application states on P. 3-19 that a single pipe is used as the emergency and primary spillway system and this pipe will pass 30 cfs. The application must include sufficient information to demonstrate this statement. Typically, presentation of a stage-discharge curve including calculations and assumptions demonstrating the ability to pass the design events of UMC 817.46 (g) and (i) is submitted to demonstrate compliance with this regulation.

   c. In order to facilitate review, map 3.2.1-3 should depict the elevation of the top of the spillway and the elevation of the design peak flow depth. These elevations are given on p. 3-19.

d. The application should demonstrate the decant system will have a discharge rate sufficient to meet the required detention time. If the pond is a total containment design, a commitment to only dewater the pond following a 24 hour detention time for all runoff events will be acceptable.

5. Map 3.2.1 states the pond is designed to treat runoff from 5.76 acres, but P. 3-19 states the pond is designed to treat drainage from 7 acres. Please clarify and insure this drainage area corresponds to the drainage area depicted on Map 3.2.1.

6. A certification statement that the ponds were constructed as per the designs or certified as-built drawings must be submitted as per UMC 817.46 (r).

7. The application should contain the certification reports required by UMC 817.49 (h).

8. The postmining monitoring plans should incorporate a monitoring plan proposed to determine the quality of the drainage entering the sedimentation pond. The plan should include monitoring points, methodology of sampling (i.e. grab, single stage samplers, automated samplers, etc.) frequency of sampling, and a commitment to sample parameters required by State and Federal regulations at the time of reclamation.

UMC 817.46 Hydrologic Balance: Sedimentation Ponds - JRH

Although the loadout sediment pond does not meet the 5:1 combined inslope and outslope criteria as set forth in this section, the stability analysis ensures that the operator is in compliance with the intent of this section and a variance from this section is approved.

UMC 817.47 Hydrologic Balance: Discharge Structures - RS

The application should contain designs and plans to protect the outlet area of the loadout facility sedimentation pond. These plans must include calculated outlet velocity (for a 25 yr. -24 hour peak flow event) and energy dissipator designs as needed.

UMC 817.48 Hydrologic Balance: Acid-Forming and Toxic-Forming Materials - JSL

Pages 3-61 and 4-42 state that no acid-forming or toxic-forming materials are anticipated at the Skyline Mines. Section 4.16 states that an analysis has been run to insure that the underground developement waste materials are not acid-forming or toxic-forming materials. The applicant lists data in the supplement to the Hydrology chapter, Appendix A-1, the Geology chapter, page 45-47 Appendix A-3, Table 2.2.8-2, page 2-18 and Table VIII (summary of sulfur form analysis), page B-12 of the Geology Chapter.

The Division finds that the presented data does not adequately reflect the previous determination that the underground waste materials are not an acid-forming or toxic-forming material. To determine if the material is acid-forming, the acid base potential must be quantified. The percent total sulfur can be used to calculate the acid production potential. To accurately quantify the acid base potential the neutralization potential (NP) must be known. The NP is derived from the percent calcium carbonate of the material (see attachment A). Furthermore, analysis of other components necessary to develop a negative determination for toxicity was unfortunately neglected in past reviews. To fully characterize the underground developement waste the following parameters should be analyzed: pH, electrical conductivity, sodium adsorption ratio, texture, selenium, and boron.

As reflected in section 4.16 the applicant states that the waste material from the sediment pond will be analyzed for toxicity prior to disposal in the rock waste disposal area. The applicant has not detailed what analysis would be run to determine whether the materials are toxic. The Division advises that the above stated parameters be analyzed for this determination.

UMC 817.52 Hydrologic Balance: Surface and Ground Water Monitoring - DC

The operator has submitted sufficient information in order to determine this section complete. The Division is in the process of reviewing the submitted data and summaries in order to determine if the current monitoring program is in compliance with the established guidelines for surface and ground water.

UMC 817.57 Hydrologic Balance: Stream Buffer Zones - RS

Previous disturbance to the stream buffer zone has already occured at the site. The stream meets the requirements of subsection (c) as it contains a biological community. This requires the applicant to 1) restore the original stream channel and 2)

insure water quality and quantity will not be adversely affected. Current plans to restore the stream channel are technically inadequate. See applicable comments under channel reclamation and design regulations (identified with initials DC).

UMC 817.59 Coal Recovery - JRH

The operator has provided sufficient information regarding coal recovery. However, the operator has not provided confidential information in a separate binder such that the Division may file that data separately. The operator shall incorporate all confidential information into a separate binder so that the mining and reclamation plan can remain available to the public. Further, OSM will not distribute copies of the mining and reclamation plan to other federal agencies until the operator provides for the separation of such confidential information. The operator has been notified of this situation by phone in order to expedite the distribution of the copies to their respective agencies.

UMC 817.61-.68 Use of Explosives - JRH

Part 4.8.3 of the mining and reclamation plan indicates the requirements and the design and location of explosives magazines located on the site pursuant to state and federal regulations. The operator does not describe the intended use or application of the explosives to be used within the permit area. The operator shall provide a description of any incidental use of explosives on the surface and assure that such use shall be in accordance with this section. This section is not considered to be technically complete.

UMC 817.71 Disposal of Excess Spoil and Underground Development Development Waste: General Requirements - DC

The operator has submitted some design information for the undisturbed diversion at the rock disposal area. However, the operator must still submit a map of the watershed area draining to the diversion and a design for a stable channel lining since the predicted design velocity is capable of eroding an earthen channel.

UMC 817.71-.81 Disposal of Excess Spoil and Underground Development Waste: General Requirements - JRH

The operator has incorporated into the mining and reclamation plan, information regarding the disposal of excess spoil and underground development waste. Information included in the plan appears to be adequate from the standpoint of earthwork and grading of the materials during the construction and reclamation of the disposal site. Refer to comments by others regarding the sufficiency of cover materials, hydrology or revegetation requirements for the site. This section is considered to be technically adequate.

UMC 817.72 Disposal of Underground Development Waste and Excess Spoil: Valley Fills - DC

The operator must submit a discussion that includes designs for the rock drain in the topsoil fill area. Additionally, the operator must submit designs that demonstrate that the diversion conveying runoff from the area above the fill around the stockpile is capable of passing the 100-yr, 24-hr precipitation runoff. Diversion designs must comply with section UMC 817.43.

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