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April 25, 1989

Mr. J. Thomas Paluso  
Chief Engineer  
Soldier Creek Coal Company  
P. O. Box I  
Price, Utah 84501

Dear Mr. Paluso:

Re: Mid-Permit Term Review, Soldier Creek Coal Company, Soldier Canyon Mine, ACT/007/018, Folder #2, Carbon County, Utah

A five year permanent program mining permit for the Soldier Canyon Mine was issued by the State of Utah on February 3, 1987. In accord with Rule UMC 788.11, a Mid-Permit Term Review (MPTR) is now due. Attached is a flow chart outlining the steps and time frames of the MPTR process.

The Division has reviewed the permit, with conditions, and the current Mining and Reclamation Plan (MRP) on file, and determined that the MPTR will include the following: a technical update of the MRP to ensure compliance with current DOGM policy and regulations, and a re-evaluation of the bond requirement, which will be completed after the proposed new portal facilities plans have been approved.

Attached is a review document which identifies deficiencies found in the current MRP. As noted, review of some sections will be incorporated into review of the surface facilities amendment, when submitted.

Please submit a complete response to all items not concerned with the new facilities by June 9, 1989. The MPTR process should be completed by August 3, 1989.

Mr. J. Thomas Paluso  
Soldier Creek Coal Company  
ACT/007/018

Please feel free to contact me or James Leatherwood, Reclamation  
Soils Specialist, if you need further clarification or assistance.

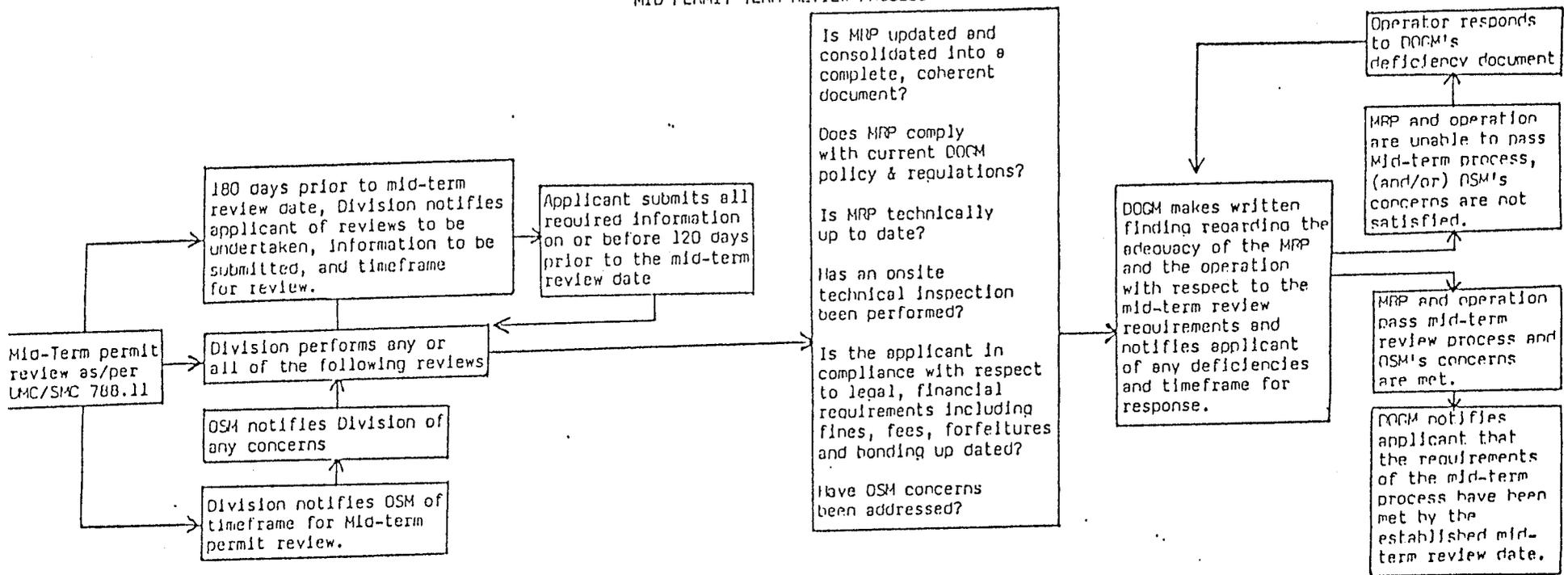
Sincerely,



Susan C. Linner  
Reclamation Biologist/  
Permit Supervisor

cl  
cc: P. Rutledge  
R. Hagen  
L. Braxton  
B Team  
BT45/215-216

MID PERMIT TERM REVIEW PROCESS



MID-PERMIT TERM REVIEW

SOLDIER CREEK COAL COMPANY  
Soldier Canyon Mine  
ACT/007/018

April 25, 1989

UMC 776.11 General Requirements: Exploration of Less Than 250 Tons  
- SCL

As part of a Mid-Permit Term Review (MPTR) submittal, Soldier Creek Coal Company (SCCC) should submit updated information on the 1988 exploration program, which should include a map showing the location of all holes drilled, and the area to be affected by portal construction in 1989. A narrative should also be submitted documenting when final reclamation will be achieved for those holes which will not be re-disturbed. SCCC should commit to notify the Division when reclamation is finished so that an inspection of the revegetated areas can be done. This information does not have to be formatted for insertion into the Mining and Reclamation Plan (MRP).

UMC 783.17 Alternative Water Supply Information - MMD

UMC 817.41 Hydrologic Balance: General Requirements - MMD

The operator incorrectly states in the MRP (page 7-7) that UMC 783.17 has been remanded. This regulation is currently employed in the Utah Coal Mining Rules and all requirements thereof must be addressed in the MRP. The operator appears to have confused this regulation with UMC 817.54, pertaining to the replacement of water rights, which has been remanded.

Mining has been conducted below Soldier Creek, a perennial stream, under as little as 60 feet of overburden. The lower stream reach through the permit area is therefore considered extremely vulnerable to potential subsidence effects. The operator should specifically address potential effects of subsidence upon any perennial stream flow and subsequent effects upon the alluvial valley floor immediately downstream of the mine permit area. A description identifying alternative sources of water supply which can be developed to replace the existing sources must be included in the MRP.

UMC 783.18 Climatological Information - LK

Various references in the MRP to total annual precipitation are in conflict. Page 3-68 reports 10", page 3-72 reports 16", the soils descriptions report 14 to 20". The vegetation present at the central facilities area would indicate at least 14 inches. Please correct the conflicting data.

UMC 783.19 Vegetation Information - LK

Page 3-163 states that the reason for not collecting baseline data (vegetation data from existing disturbed areas) is that there is no intent to expand. This statement is in conflict with the proposed new portals. The justification for not collecting baseline data is that the area is mostly disturbed and comparisons of data from this area with proposed reference area data are not valid. Please correct the discrepancy.

UMC 783.20 Fish and Wildlife Information - LK

The section discussing raptor protection on powerlines should include a reference to the U.S. Fish and Wildlife Service survey report (dated October 9, 1981) which states powerlines are "safe". A copy of the report should be included as an Appendix to the MRP.

UMC 783.22 Land Use Information - LK

The MRP (land use section) needs to include information regarding past mining as required by part (b) of this regulation.

UMC 783.25 Cross-Sections, Maps and Plans - JSL

Cross section C-C', found in D-178 does not define the rip-rap ditches depicted on E019. Drawing number D-178, cross section C-C' must be resubmitted with the appropriately located rip-rap ditch.

UMC 784.13 Reclamation Plan: General Requirements - LK

(b)(5) Exhibit 5.4-1 does not show the locations of where the various seed mixes (riparian) or major revegetation treatments will be implemented. A map or other suitable description which identifies these areas needs to be provided.

(b)(5)(ii) Atriplex canescens (4-wing saltbush) and Sphaeralcea coccinea (Globemallow) are apparently inappropriate for the central facilities area and the riparian area and should be replaced with appropriate species (these species have not been successful in field trials). It is recommended that 4-wing saltbush be replaced with Ceretoides lanata (Winterfat) at the same rate, and that globemallow be replaced with Melilotus officinalis (Yellow sweetclover) and Osmorhiza occidentalis (Sweet anise) in the riparian area seed mix (each at a rate of 1.0 lb. per ac. PLS), and Aster glaucodes (Blueleaf aster) and Penstemon strictus (Rocky Mountain penstemon) in the central facilities area seed mix (each at a rate of 0.5 lbs. per ac. PLS).

(b)(5)(iii) It is recommended that broadcast seeding be done before the area is cat-walked (see page 5-55). This would help cover the seeds. Also, to aid vegetation establishment, all areas should be left in a very roughened condition.

(b)(5)(iv) Mulching material with a pH lower than 6.0 could potentially impact vegetation establishment. Page 5-45 indicates mulch with a pH greater than 3.5 could be used. This should be revised.

(b)(5)(vi) Page 5-62 should reference section 5.6.12 of the MRP to resolve conflicting monitoring plans.

Page 5-61 requests a variance to establishing the required 90% of reference area shrub density on reclaimed areas. Before this variance can be granted, the operator must provide adequate documentation (and/or data) to justify the variance and provide an alternate density standard (demonstrate the reduced rate would improve wildlife habitat, enhance (improve) the postmining land use, etc.).

On page 5-70c, the description of the method to be used for determining cover by species is in error. When using a pin-frame for determining plant cover, cover by species includes the first interception of the pin as well as all subsequent hits as the pin is lowered through the vegetation canopy (this can and often does add to more than 100%). Total cover considers only the first interception of vegetation and when added to values for rock, litter and bare ground equals 100%. Please revise.

#### UMC 784.14 Protection of Hydrologic Balance - DD

The applicant needs to update the Mining and Reclamation Plan by incorporating:

1. In-mine water monitoring data should be summarized and incorporated in the ground water section.
2. Well monitoring data should be summarized and incorporated in the ground water section.

UMC 784.18 Relocation or Use of Public Roads - JRH

The operator is currently operating within 100 feet of a public road and is in accordance with the requirements of this section. Proposed facilities on site will encroach on the road and may involve re-alignment of the public road. Additionally, with facilities on both sides of the public road, the operator will frequently utilize the public road for routine surface operations. This impact on the use of the public road will require that the operator receive concurrence from the county for the modifications and intended use of the road.

If the operator proposes to relocate the public road, notice and an opportunity for a public hearing will need to be provided in accordance with this section and UMC 761.12(d).

UMC 784.19 Underground Development Waste - JRH

Although the waste rock disposal facilities have been included in the existing MRP, design details for the site have yet to be completed. If final designs for this area are not completed in conjunction with the new portal construction, they will be required to be submitted and approved prior to permit renewal.

UMC 784.20 Subsidence Control Plan DD

1. Overburden isopach maps need to be submitted where mining will take place above or adjacent to each seam to be mined.
2. The current subsidence monitoring program should be incorporated into the MRP with all monitoring data.
3. Information needs to be submitted which shows the current sequence and plans for mining under perennial streams.

UMC 784.21 Fish and Wildlife Plan - LK

Page 4-74 states that "the applicant reserves the right to amend the fish and wildlife plan, since 30 CFR and UMC 784.21 are presently suspended". The Division does not question the applicant's right to amend plans, however the statement regarding the status of these regulations should be deleted from the MRP since 30 CFR 784.21 was revised and re-instated as a final rule on December 11, 1987 (see Federal Register for that date) and UMC 784.21 has not been suspended.

UMC 784.24 Transportation Facilities - JRH

Transportation facilities, primarily conveyor, storage and loading operations on the site will significantly change as a result of the proposed modifications to the MRP. Comments regarding this section will be made in conjunction with review of those proposed modifications to the plan.

UMC 800 Bonding and Insurance Requirements - JRH

The operator currently has bond in the amount of \$522,592.00 provided by Federal Insurance Company as surety. A rider to that bond, received on September 2, 1987, increases the bond amount to \$577,000.00. This rider provides for the addition of the waste rock disposal facilities which increased the disturbed area acreage from 11.5 acres to 32.2 acres.

Additional facilities proposed at the mine will significantly affect the bond amount required for the operations. In conjunction with the approval of these facilities, the Division shall determine a new bond amount for the Soldier Canyon Mine.

The Division has revised bonding forms required for coal mining operations. This Reclamation Agreement is found enclosed for the operator's reference and future use. Subsequent changes to the form and amount of bonding required for Soldier Creek shall be provided to the Division on these forms.

The operator has proposed a change in the type of bonding from surety to self-bond. This proposal is found within the text of the MRP and also was received separately by the Division on September 2, 1987. In response to the operator's request, in a letter to Soldier Creek dated September 13, 1987, the Director indicated that "No new applications for self-bonds will be approved at this time. Therefore, the Soldier Creek Coal Company proposal for self-bonding will not be approved."

With regard to this determination by the Division, information regarding self-bonding presented in the MRP should be removed to avoid confusion as to the current form and amount of bond that is currently approved in the plan. Should the operator wish to re-apply for self-bonding, the application should be made in the form of a proposal and not included within the text of the MRP. Only approved information should be found within the text of the MRP.

See also comments under UMC 817.101.

UMC 817.15 Casing and Sealing of Exposed Underground Openings:  
Permanent - JRH

Information regarding this section is found in part 5.2.2 of the MRP. The operator states that "Earth fill will extend into each portal opening a distance of at least 12 ft." The operator needs to revise the plan to increase the backfilling distance to a minimum of 25 ft. in accordance with MSHA regulations.

UMC 817.22 Topsoil: Removal - JSL

No discussion was found within the MRP pertaining to the salvaging and protection of the topsoil materials at the Lagoon site. Discussion pertaining to topsoil from the Lagoon site must be included within the permit.

UMC 817.23 Topsoil: Storage - JSL

Plate E020 delineates the proposed topsoil storage pile location within a drainage. The topsoil storage pile location depicted on Plate E020 is unacceptable. All topsoil storage piles must be located on a stable surface and protected from wind and water erosion. The proposed location of the topsoil stockpile within a drainage is not considered stable nor satisfactory for protection from wind and water erosion. The proposed location of the topsoil stockpile must be relocated to a flat stable surface, and stabilized through revegetation and earthen berms. Refer to the Division's Guidelines for Management of Topsoil and Overburden, section B, Topsoil Storage and Protection, page 3, for further guidance.

UMC 817.42 through UMC 817.49 Sediment Control Structures - MMD

A preliminary analysis has been conducted on the approved runoff control system at the existing mine facilities but a thorough technical evaluation has not been conducted at this time. The operator has recently notified the Division of its intention to submit plans in the near future for additional surface facilities. The operator has indicated that significant alterations of the present facilities will take place requiring a thorough technical analysis of the runoff control system at the time of submittal. Therefore, to avoid analytical duplication and facilitate the review process, the aforementioned regulations will be reviewed as part of the proposed amendment.

UMC 817.46 (e-u) Hydrologic Balance: Sedimentation Ponds - MMD

UMC 817.49 (c) Hydrologic Balance: Permanent and Temporary  
Impoundments - MMD

The operator must submit a copy of the approved plans for the sewage lagoon, and a copy of approval from State Health.

UMC 817.47 Hydrologic Balance: Discharge Structures - MMD

UMC 817.49 Hydrologic Balance: Permanent and Temporary Impoundments  
- MD

The operator has committed to utilizing energy dissipators at the sedimentation pond inlet structure outlet and the spillway outlet. However these structures are not depicted on the as-built pond drawing (D 202) nor could any detailed engineering structural designs be located in the MRP. The operator must submit specific designs for any energy dissipation structures utilized on site including dimensions, material size gradation, etc. The location of these structures must be depicted in the as-built drawing of the sedimentation pond.

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

Page 4-70 of the MRP states that static water levels will be monitored in four wells and refers to Table 4.4-2. This table identifies only two wells as monitored observation wells. The operator must clarify this discrepancy by identifying the additional monitoring wells in Table 4.4-2 and Exhibit 3.2-1.

As part of the mid-term review process the Division is currently implementing the attached surface and ground water monitoring guidelines. The operator is currently monitoring the water quality constituents listed in the guidelines with the exception of surface water acidity. The Division feels that conditions in Soldier Creek justify analyzing nitrate and nitrite levels in addition to the listed constituents for both surface and ground water monitoring. Therefore the operator must include nitrate and nitrite analysis in both the surface and ground water operational monitoring programs and add total alkalinity analysis (to replace acidity) to the surface water program only.

A detailed description of surface and ground water sampling methodology must be included in the MRP. This will verify that samples are being collected properly thus ensuring data integrity and quality assurance of the monitoring program. All groundwater constituents should be analyzed in dissolved form while surface water constituents should be analyzed in both dissolved and total forms.

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

Requirements for this section of the regulations is found in part 4.2.9 of the MRP. The operator intends on developing an underground waste disposal site approximately 2 miles from the mine location.

Modifications to the plan may require that the construction of the waste disposal facilities commence in conjunction with the development of the new portal facilities. Recent design information for the new portal facilities indicate that there will most likely be a shortage of fill material for construction. However, sampling and analysis of the excess spoil and mine development waste that is currently intended for the fill material may result in unsuitability of these materials for fill within the flood plain of the facilities. In the event that the material is found unsuitable for fill in this area, the waste disposal site will have to be constructed to handle this material.

It is recommended that these materials be samples as soon as possible to determine the location and disposition of this material.

UMC 817.101 Backfilling and Grading: General Requirements - JRH

Backfilling and grading is covered in the plan in part 5.4 of the MRP.

Earthwork and mass balance calculations have not been included in the MRP for determination of excess materials for the site during reclamation. Since the proposed modifications to the plan will require extensive earthwork for both operational and reclamation activities, these calculation should be provided in conjunction with the proposed portal facility additions.

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In conjunction with the earthwork calculations, the operator needs to expand the calculations provided in the cost estimate for reclamation. The current calculations only provide the number of equipment hours estimated for earthwork. Quantities, equipment selection and productivity calculations need to be included in the backfilling and grading plans or in conjunction with the cost estimate for reclamation.

BT144/1-9