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Sunnyside #5 ACT/007/007

Mine File (Sunny Side 5) J. Whitehead UD0611

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DIVISION OF
OIL, GAS & MINING

Moab District
P.O. Box 970
Moab, Utah 84532

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Memorandum

To: Utah Senior Project Manager, OSM, Denver

Attention: Mr. Rick Lawton

From: District Manager, Moab

Subject: Kaiser Coal Corporation, Sunnyside No. 5 Mine
Mining and Reclamation Plan (MRP) Review

By cover memo dated August 21, 1986, you forwarded to this office a nine (9) volume set of the subject mining and reclamation plan (MRP). This submittal is a complete new Permit Application Package (PAP) for Kaiser's B Canyon and north coal leases area. This plan utilizes the surface facilities of the Sunnyside (1-3) mines presently being mined under a separate MRP approval as well as providing additional surface facilities described in B Canyon and elsewhere.

This submittal has been reviewed for completeness and technical adequacy pursuant to the cooperative agreement between our offices for conformance with regulations 43 CFR 3480, in particular those subparts dealing with resource recovery and protection plans (RRP2) and underground coal mining operations, dated September 16, 1983, revised as of October 1, 1985, in the Code of Federal Regulations.

This MRP has been assembled after the "Permit Application - General Guideline for Organizational Format and Content" prepared by the Utah Division of Oil, Gas and Mining. Accordingly, our review followed the "Resource Recovery and Protection Plan - Checklist" ("Checklist") as outlined from the regulations cited above, in particular 43 CFR 3482.1(c). The Introduction in Volume IX Exhibit 17 entitled "Resource Recovery and Protection Plan", page 17-1 states, "This RRP2 is, for the most part, a stand alone document when read with other information found in the No. 5 Mine Permit Application." However, the RRP2 is interspersed throughout the complete PAP, with the exception of Volume VI, which stretches the concept of a stand alone document. Notations were made on the checklist to determine the completeness and adequacy of the plan. The following are our comments:

1. The "Permit Area" includes Federal lands which are not under lease. The projected mine plan does not include these areas. There is mineable Federal coal in these unleased areas that should be mined from the Kaiser No. 5 Mine.

In verbal discussions with representatives of the Company, Kaiser has expressed a desire to obtain the unleased lands and plans to make application for leases covering these areas when the mine development approaches them.

A formal written commitment demonstrating Kaiser's intent to obtain the necessary leases should be addressed in the plan prior to PAP approval.

2. Mining sequence by periods or time blocks shown on the mine maps are not all consistently labeled from one map to the next. These appear to be minor oversights that can be resolved routinely by minor modification after the PAP approval.

3. Strike and dip is not identified on the mine or geologic maps. However, the general strike and dip is inferred and is not difficult to determine using structure contour lines provided in the plan. Strike and dip symbols are helpful and should be provided when submitting mine maps.

4. The method for removing the coal from the mine is not shown on the maps, but it is discussed briefly in the narrative. However, in verbal discussion on this subject with representatives of the Company, transportation of the coal from the mine in the long term is still a matter of consideration. There are at least three alternatives being discussed.

a. Route the coal down slope to the existing conveyor system near the No. 1 Mine longwall panel and use these facilities to transport the coal from the mine to the tipple area.

b. Drive a rock tunnel directly to the tipple area from the No. 6 Mine area.

c. Drive entries west to the outcrop and run a conveyor belt overland to the tipple area.

Other alternatives may materialize as this question is resolved. For the R2P2 to be a complete plan, a map should be included showing the haulage route and surface facilities to be used. Viable alternate proposals should be included in the plan for our review. In the event they become the accepted plan, the review process will already be completed.

5. Sketches of typical mining systems to be used should provide adequate dimensions or show a scale for each drawing.

6. The 500-foot barrier left along the outcrop in the plan should be qualified. A statement should be made that the situation will be monitored as mining progresses for possible changes.

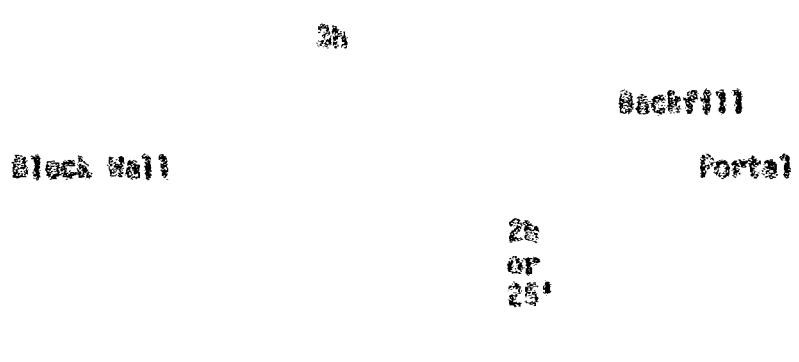
In most cases a 200-foot outcrop barrier is adequate to protect the surface considerations. Greater widths would be required only as physical conditions, such as burned coal inby the normal barrier width, dictate.

7. An explanation is requested of Kaiser why the Rock Canyon and Gilson coal seams of Federal coal lease U-02706 are not considered commercially mineable. Each seam shows sufficient quantities to be commercially mineable. Particulars can be discussed directly with BLM representatives.

8. An explanation is requested of Kaiser why the Rock Canyon seam of Federal coal lease U-039706 has no coal reserves identified. BLM has determined substantial reserves, however, in the plan this seam is not considered economically recoverable. Particulars can be discussed directly with BLM representatives.

9. Kaiser should submit a copy of the MSHA approved ventilation, roof control, and pillar extraction plans to the Price River Resource Area office, as an appendage to the MRP when it is approved.

10. Map SS-40 shows backfill, in portals to be sealed, as 25 feet. It should be pointed out that the block wall seal should be at a point 25 feet or twice the coal thickness (whichever is greater) inby the portal with overburden not less than three times the coal thickness.



Closure must be approved by BLM prior to action.

In addition to the comments above on R2P2, the following comments and concerns regarding environmental matter are provided.

General

1. Cumulative impacts cannot be adequately addressed, because unknown impacts arising from necessary off-permit projects have not been addressed (or have not been officially proposed). Example: The minor road proposed in the mine plan has not been discussed for areas outside the permit boundary. Although off-permit, this road is an extension of the road identified in the proposed mine plan and should be described, only then can cumulative impacts be addressed.

2. The mine plan indicates that coal will be moved underground through the old mine works and exited through existing portals. Communications with Company representatives have indicated this may be unfeasible and they are looking into limited truck haulage (from C Canyon) and possibly an overland conveyor from an existing portal in B Canyon. Discussions concerning the road to C Canyon indicates it would be a class I road making it usable for coal haulage trucks. Therefore, a complete impact analysis cannot be made until the mode and route of coal haulage is known; and if alternatives other than those described in the plan are being considered, they should be discussed in the proposal.

Wildlife Resources

1. 783.20-1 (Vol. I) - Comment: Elk also occupy the permit area.

Recommendation: Indicate/describe in text on existing environment.

2. 783.20-6 (Vol. I) - Comment: Elk also occur in the permit area - Range Creek herd.

Recommendation: Indicate/describe in text on existing environment.

3. 783.22-1 (Vol. I) - Comment: The addition of surface facilities and the associated mining operations represent a significant cumulative impact to wildlife resources.

Recommendation: Acknowledge this cumulative impact to wildlife resources.

4. 784.21 1-8 - Comment 1: It should be noted that the wildlife survey conducted in the facilities area in June does not portray the importance of the area as winter range for mule deer.

Recommendation 1: Clarify the timing of survey and that winter use by deer in the facilities area has not been evaluated.

Comment 2: Approximately 15 to 20 acres of mule deer critical winter range and elk winter range would be disturbed for the life of the mine. The remainder of the disturbance would affect mule deer winter range. The Price River Management Framework Plan (MFP ML-1.3) prohibits loss of critical winter range where alternatives exist. In cases where reasonable alternatives are lacking, such losses are to be mitigated for offsite. Losses of 10 acres or more is considered significant.

Recommendation 2: a. Acknowledge significant impact.

b. Develop a mitigation plan to compensate for the loss of critical winter range. Mitigation plan should address enhancement of adjacent habitat areas. Enhancement methods can include water development and/or vegetative treatment to improve winter forage for mule deer.

Two project proposals are described below for consideration.

a. Construct self-contained maintenance free 2,100 gallon guzzler with trough in T. 14 S., R. 13 E., Sec. 27, NW1/4NW1/4. Build 5 acre exclosure around guzzler using 4 strand barb wire fence constructed to BLM fencing standards.

b. Construct 8,000 gallon water storage tank, pipeline and trough for wildlife in T. 14 S., R. 13 E., Sec. 21, NE1/4NE1/4. Run pipeline from mine water discharge line to storage tank.

Comment 3: Riparian habitat will be disturbed. The UDWR and the USF&WS have identified the ephemeral wash bottom of C Canyon as riparian habitat. Riparian habitat is important and its loss for the life of the mine is considered significant.

(Note: Riparian habitat is not mentioned as occurring in the facilities area.)

Recommendation 3: Recommend mitigation for the loss of riparian habitat associated with the C Canyon.

Establish riparian habitat in the wash bottom in which the mine water pond overflow feeds. Develop mitigation plan to accomplish this objective.

Comment 4: A low prey base is presently the cause of "very limited" raptor use. The Book Cliff area generally supports a high density of nesting raptors, as evidenced by the high density of stick nests. As the prey base rebounds, so will nesting activities.

Recommendation 4: Acknowledge in text.

Comment 5: Raptor monitoring studies proposed are inadequate.

Recommendation 5: Utilize the raptor inventory, in conjunction with previous inventory work as baseline data, to establish a monitoring study for the raptor populations on the Kaiser lease area. At a minimum the monitoring study would address the following:

a. Annual nesting status of all raptor nests within 1 mile of facility locations, including identification of new sites.

b. Identification of raptor nest sites considered to be at risk of escarpment failure as a result of potential subsidence. Establish a monitoring schedule to determine nest status of these nest sites prior to mining activity and following the cessation of any mining activity which puts the nest at risk.

5. 783.22-2 (Vol. I) - Comment: Significant impacts will affect wildlife resources.

Recommendation: Acknowledge in text.

6. 817.21-22 (Vol. II) - Comment 1: Reference to mule deer use in the No. 5 Mine area as "almost not quantifiable" is misleading. The No. 5 Mine area represents winter range. A summer survey, as was conducted by Kaiser, will obviously not detect a significant amount of use.

Recommendation 1: See item 4 above, Comment 1 and Recommendation 1.

Soils and Reclamation

Soil and Surface Comments: Order 2 soil survey map SS-28: Alluvial area below mouth of C Canyon in the SE1/4 of Sec. 15 is mapped as XST - Strych very stony sandy loam. Staff observation while walking the road indicated the soils here are predominantly nonstony at the surface. (This is where part of the class III road and the sedimentation ponds will go.) Topsoil suitability rating should be good instead of poor for area, if nonstony.

Recommendation: Consider ST mapping unit here.

Topsoil requirements: Volume I, 883.21-12, Table 28; 783.21-14 Table 29; 783.21-15 Table 30; 784.13-2 Topsoil removal.

Comment: Kaiser plans to strip about 2 feet of topsoil of the Strych Series on 11.5 acres in soil mapping units XST and XGE-ST and spread it on about 28 acres of disturbed surface for reclamation. Ten to 20 percent of the stones and boulders would be separated from this soil to make it suitable for that purpose. The redistributed topsoil would cover the ground to a depth of about 12 inches. The other soil mapping units are considered unsuitable for topsoil because of combinations of shallowness, high rock fragments, rock outcrop, and steepness.

Our concern is that much of the Strych soil which is to be stripped for topsoil lies on slopes greater than 30 percent, it is considered unsafe and impractical to strip and redistribute soils on these slopes. 8.68 acres of Strych soil on the XST unit is suppose to be stripped. BLM staff roughly estimates that 1.6 acres of this is on slopes greater than 30 percent. Given these figures, the actual soil stockpiled could be as much as 5,000 yards less than calculated, assuming 2 feet average depth of soil is removed. The mine plan states that the amount to be stockpiled is the suitable area times the depth. If slope limitations were considered, and Kaiser has a practical way of stripping and replacing soil on slopes steeper than 30 percent this should be addressed. If slope limitations were not considered it should be, and the soil stockpiling figures recalculated.

Kaiser states that only the Strych soil is to be stripped and not the Gerst soil which is associated with it in mapping unit XGE-ST. The Gerst soil is shallow (greater than 20 inches to shale bedrock). The shallowness of the soil is not a limitation to its suitability as a source of topsoil in this case as table 29 states. Suitability criteria for topsoil is based in part on the assumption that the candidate soil for a source of topsoil is to be stripped and the topsoil used elsewhere. Consequently leaving enough good soil in place after stripping would be important to ensure that the soil's productivity is not severely affected.

But this is not the case here. Soil which is removed will be replaced. Soil which is not removed on a shallow soil on sloping ground will be largely lost in the huge volumes of rock cut if the soil is not first saved. The top layers of the Gerst are just the same as the Strych. Stones will have to be sifted out in places to improve its suitability, but it, as well as the Strych, should be saved.

Saving the Travessilla soil (shallow) on the RD-BL may not be practical because of steep slopes and a lot of rock outcrop intimately associated with it; but if there are any places where slopes are flat enough and the rock outcrop is not of great extent, the soil should be saved.

Recommendation: Address these concerns.

Reclamation - Comment: By constructing the class II road most of the trail-road to the mouth of 8 Canyon will not be within the disturbance of the class II road. Since there would no longer be any need for this by-passed section of road, it should be reclaimed. The same would also apply to that part of the access road for the water well from the turnoff at the NE1/4SE1/4SW1/4, Sec. 15 onward which will not be part of the class III road, accessing the mine facilities.

Recommendation: Address these concerns.

Vegetation

Threatened and Endangered Plants - Comment: Hedysarum occidentale var. canone is known to exist in the area.

Recommendation: Additional information more carefully addressing this plant must be made for such items as, the number of plants in all disturbance areas, mapping of significant populations (15 or more plants per 1,000 sq.ft. area), as well as what procedures will be initiated to provide for the protection of the significant populations that are identified.

Hydrology - Comment: What will the quality of mine discharge water be? Although discharge water is often of higher quality than surface water in this area, this item should be described. How will water testing be done, if potential water quality problems exist, how will Kaiser deal with this? Kaiser is presently initiating water quality monitoring from exploration holes. What is their monitoring plan, and how was it designed to assure adequacy?

Recommendation: Address water quality and water monitoring issues.

Sewage Disposal - Comment: There is no discussion concerning the suitability of the soils for leach filed development. Also, how much sewage will have to be handled?

Recommendation: Address this issue.

If you have any questions or comments, please contact James Dryden, Allen Vance in our Price Office at (801) 637-4584 or Brent Northrup in Moab at (801) 259-6111.

Sincerely yours,

/S/ GENE NODINE

District Manager

cc: USO (U-921)
UDOGM, Salt Lake City
Kaiser Coal Corp., Colorado Springs, CO
Kaiser Coal Corp., Sunnyside, UT

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