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File: ACT/007/006



WESTCENTRAL ENVIRONMENTAL CENTER
720 SOUTH COLORADO BLVD.
DENVER, COLORADO 80222
303/758-3438

WCEC-08-81-38

Client No. 6999

August 28, 1981

Mr. John Nadolski
Office of Surface Mining, Region 5
Brooks Tower
1020 15th Street
Denver, Colorado 80202

RECEIVED

AUG 30 1981

DIVISION OF
OIL, GAS & MINING

Dear Mr. Nadolski:

Attached are sections 817.13-15 (Casing and sealing), 817.71-74 (Disposal of underground waste), 817.81-93 (Coal processing waste), 817.99 (Slide damage), 817.100 (Contemporaneous reclamation) and 817.181 (Support facilities). Part 817.101-106 (backfilling and grading) will be submitted on 31 August 1981.

Sincerely,

A handwritten signature in cursive script, appearing to read "Andrew R. Grainger", with a horizontal line extending to the right.

Andrew R. Grainger
Associate Ecologist

ARG/io

cc: R.J. Eastmond



817.13-15 CASING AND SEALING OF EXPOSED UNDERGROUND OPENINGS

A. DESCRIPTION OF EXISTING ENVIRONMENT

Three mine portals exist on the MPA, two entering the Wattis seam and one the Hiawatha. One surface breakout exists for ventilation in Mud Water Canyon and one is planned for Seeley Canyon. Drill hole locations are shown on plates 2-1 and 6-6A, B and C.

B. DESCRIPTION OF APPLICANT'S PROPOSAL

The applicant proposes to seal all mine openings, drill holes and wells (p. 3-110 through 3-111). Upon abandonment of drilling operations, all drill holes will be cemented from the bottom to within three feet of the collar and a monument will be placed over each hole. Upon mine abandonment ventilation shafts will be filled from bottom to collar with non-combustible material. Seals will be installed in all entries as mining is completed. The seals will be located at least 25 feet inside the entry and will be constructed of concrete blocks with a total thickness of 16 inches. An illustration of proposed portal seals is shown on p. 3-20. Where possible, the entry will be filled with non-combustible material graded to conform with natural contours and revegetated.

C. EVALUATION OF COMPLIANCE

When the above plans are completed, the applicant will comply with sections 817.13 through 817.15.

D. REVISIONS TO APPLICANT'S PROPOSAL

None

E. REEVALUATION OF COMPLIANCE

Not Applicable

F. PROPOSED SPECIAL STIPULATIONS WITH JUSTIFICATION

None

G. SUMMARY OF COMPLIANCE

Will comply

H. PROPOSED DEPARTMENTAL ACTION

Approve the applicant's proposal for casing and sealing of exposed underground openings.

I. ENVIRONMENTAL IMPACTS OF PROPOSED DEPARTMENTAL ACTION

Approval of the applicant's proposal will allow protection from safety hazards and from potential environmental damage.

J. RESOURCE ALTERNATIVES TO THE PROPOSED ACTION

Because the applicant's proposal will allow protection from potential damage no logical alternatives exist.

K. ENVIRONMENTAL IMPACTS OF ALTERNATIVES TO THE PROPOSED ACTION

Not applicable

817.71-74 DISPOSAL OF UNDERGROUND WASTES

A. DESCRIPTION OF EXISTING ENVIRONMENT

The applicant refers to non-coal waste areas on p. 3-22, but they are apparently not identified on maps.

B. DESCRIPTION OF APPLICANT'S PROPOSAL

The applicant states that non-coal waste areas will be covered with two feet of non-combustible material, graded, and planted (P. 3-22).

C. SUMMARY OF COMPLIANCE

The applicant is not in compliance with these sections.

D. REVISIONS TO APPLICANT'S PROPOSAL

None

E. REEVALUATION OF COMPLIANCE

Not applicable.

F. NECESSARY STIPULATIONS WITH JUSTIFICATION

1. The applicant describe the location and size of non-coal waste disposal areas and describe in detail plans for protection of resources.

G. SUMMARY OF COMPLIANCE

Does not comply.

H. PROPOSED DEPARTMENTAL ACTION

Disapproval of this section until the applicant submits maps and plans for non-coal waste disposal.

I. ENVIRONMENTAL IMPACT OF THE PROPOSED DEPARTMENTAL ACTION

Not applicable.

J. RESOURCE ALTERNATIVES TO THE PROPOSED ACTION

Not applicable.

K. ENVIRONMENTAL IMPACTS OF ALTERNATIVES TO THE PROPOSED ACTION

817.81-93 COAL PROCESSING WASTE BANKS

A. DESCRIPTION OF EXISTING ENVIRONMENT

Approximately 20 percent of the extracted coal at the Starpoint Mines is processing waste. At the present production rate of 1.2mtpy, 240,000 tons of waste are produced per year. Projected production during the permit period is 2.0 mtpy, based on a total reserve of 40 million tons. At this rate 400,000 tons of waste would be produced each year. If Plateau acquires rights to additional adjacent reserves, the total reserve would be 80 million tons and the projected maximum production rate would be 4.0 mtpy and 800,000 tons of waste would be produced yearly.

At present coal waste is stored in a waste pile east of the washing plant (Figure 5, section 13.2.6). This pile has a capacity of 3,352,400 cubic yards of storage, of which 689,360 cubic yards have been filled (section 13.2.6, p. 21). At a maximum production rate of 2.0 mtpy for 1982 to 1985 the present waste pile would be filled to approximately 75 percent of its capacity by the end of 1985, and completely filled by the end of the eighth year.

B. DESCRIPTION OF APPLICANT'S PROPOSAL

The applicant plans to expand the waste pile in three phases, starting with completion of the existing waste pile (Phase I), construction of a second pile located southwest of the current pile (Phase II), and a third pile (Phase III) which would ultimately connect the Phase I and Phase II piles. Based upon the requirement that the waste must be compacted such that its density is 90 percent of the maximum dry density the unit weight for compacted processing waste is 75 pounds per cubic foot. Therefore, based on a total reserve of 40 million tons, required waste capacity is 7,901,235 cubic yards. Based on a

total reserve of 80 million tons, a capacity of 15,800,000 cubic yards would be required. Phases I, II and III would provide storage for 11,959, 200 cubic yards, leaving 3,840,800 cubic yards of excess waste. Therefore the proposed Phase I, II and III waste piles would be adequate for the reserves being permitted at this time. The applicant has studied the feasibility of additional storage; however, because only the 40 million ton reserve is being permitted at this time only the Phase I, II and III waste storage plans are considered in this TEA.

Construction Sequence and Procedures: Assuming a 40 million ton reserve Phase I would be filled within the eighth year, Phase II would be constructed and filled by the twelfth year, and Phase III would be constructed last and would be utilized to the end of the mine life. Construction procedures will be the same for all phases. Topsoil will be removed and stockpiled prior to construction. No groundwater sources or natural surface drainages pass through the waste pile area; therefore a subdrainage system is not required. Waste piles will be constructed such that slide slopes will be no steeper than 1.75 h:1.0 v. With these side slopes and assuming 1) the gradation of future refuse will be similar to that in the existing pile and 2) the pile will remain a non-water retention system, the safety factor will be in excess of 1.5. Waste will be spread and compacted, in horizontal lifts not to exceed two feet, using a caterpillar tractor and end dump trucks. Waste will be compacted to a density of 75 pounds per cubic foot to prevent spontaneous combustion and provide the required strength for stability. Maximum height of waste piles will not exceed 150 feet.

Runoff Control Plan: Runoff from the coal waste piles will be controlled by the use of diversion ditches and sedimentation ponds (Figure 2, Appendix B, section 13.2.6). The runoff control plan contained in this section is described in section 7

(Hydrology) and part 817.41 Hydrologic Balance-Surface Water of this TEA.

Reclamation Plan: The applicant will strip topsoil from the Phase II and III waste areas for redistribution on the final graded Phase I area. Excess topsoil will be stockpiled for use in the Phase II and III waste piles. Approximately 10 inches of topsoil will be redistributed over the Phase I, II and III areas. Stockpiles will be revegetated with a temporary mix to prevent wind and water erosion. The applicant states that seed mixes for revegetation will be proposed following completion of vegetation surveys. To protect and enhance wildlife resources the applicant proposes speed limits below 30 mph on waste haul road and planting of palatable species away from the coal waste site.

Inspections: Construction inspections will be conducted quarterly by a qualified registered engineer. Inspections will consider slope, compaction, height of fill, removal and storage of topsoil and stockpile revegetation. The inspection will also insure that waste piles remain non-water retention systems by use of existing and proposed piezometers (Figure 9, section 13.2.6). Copies of inspection findings will be kept on file at the mine.

C. EVALUATION OF COMPLIANCE

817.81 When the stipulations outlined below are implemented, the applicant will comply with the general requirements.

817.82 The applicant's proposed inspection program complies with this section.

817.83 The applicant's proposed runoff control measures appear to comply with this section; however, stipulations developed in part 817.41 Surface Water of this TEA must be met.

817.85 The applicant will comply with this section.

817.86 The applicant has not developed a fire control plan.
817.87 through 817.93 These do not apply to this application

D. REVISIONS TO APPLICANT'S PROPOSAL

None

E. REEVALUATION OF COMPLIANCE

Not applicable

F. SPECIAL STIPULATIONS WITH JUSTIFICATION

1. In order to insure adequate runoff control the applicant must implement the stipulations developed in part 817.41 Surface Water of this TEA.

2. In order to insure adequate revegetation and protection and enhancement of wildlife resources the applicant must implement the stipulations developed in Part 817.111-817.116 Revegetation of this TEA.

3. The applicant must submit a plan for control of fires in the waste disposal piles.

G. SUMMARY OF COMPLIANCE

Will comply if the proposed stipulations are implemented.

H. PROPOSED DEPARTMENTAL ACTION

Approval with stipulations.

I. ENVIRONMENTAL IMPACTS OF PROPOSED DEPARTMENTAL ACTION

Because surface disposal of waste coal is the only practical method in this situation, forage and vegetation productivity of

the waste storage areas will be necessarily lost for the life of the mine. However, approval of the applicant's plan with stipulations will provide for return of these areas to productive use and for protection of other resources.

J. RESOURCE ALTERNATIVES TO THE PROPOSED ACTION

No feasible waste storage method other than surface storage is known for this situation. The applicant's plan, with the proposed stipulations will provide protection of other resources and allow for utilization of the leased Federal coal.

K. ENVIRONMENTAL IMPACTS OF ALTERNATIVES TO THE PROPOSED ACTION

Not Applicable

817.99 SLIDES AND OTHER DAMAGE

A. DESCRIPTION OF EXISTING ENVIRONMENT

The applicant has provided no information slide damage in the MPA. From the reviewer's personal knowledge of the area, small, naturally occurring slides are fairly common and small slides are often associated with abandoned roads in the area.

B. DESCRIPTION OF APPLICANT'S PROPOSAL

The applicant has not addressed this section.

C. EVALUATION OF COMPLIANCE

The applicant is not in compliance with this section.

D. REVISIONS TO APPLICANT'S PROPOSAL

None

E. REEVALUATION OF COMPLIANCE

Not applicable

F. PROPOSED SPECIAL STIPULATION WITH JUSTIFICATION

1. At any time a slide occurs which may have a potential adverse effect on public property, health, safety or the environment the applicant shall notify the regulatory authority by the fastest available means and comply with any remedial measures required by the regulatory authority. This stipulation will bring the applicant into compliance with this section and provide the means for protection from or mitigation of slide damage.

G. SUMMARY OF COMPLIANCE

Will comply if proposed stipulation is implemented.

H. PROPOSED DEPARTMENTAL ACTION

Approval with one stipulation.

I. ENVIRONMENTAL IMPACTS OF PROPOSED DEPARTMENTAL ACTION

Implementation of the proposed Departmental action will allow for prompt reporting of actual or potential slide damage and provides for remedial action.

J. RESOURCE ALTERNATIVES TO THE PROPOSED ACTION

Because all facilities and roads are designed in accordance with accepted engineering practice and because it is in the applicant's economic interest to prevent slides there are no effective alternatives to the proposed action.

K. ENVIRONMENTAL IMPACTS OF ALTERNATIVES TO THE PROPOSED ACTION

Not Applicable.

817.100 CONTEMPORANEOUS RECLAMATION

A. DESCRIPTION OF EXISTING ENVIRONMENT

Several areas on the Starpoint Mines MPA have been used for coal production activities in the past and are now abandoned (Plates 3-6A through 3-6E). In addition several areas are now being used for production.

B. DESCRIPTION OF APPLICANT'S PROPOSAL

The applicant states (section 3.6.2, p. 3-105) that "Interim reclamation (during operations) is occurring in areas that are no longer needed or that require short-term stabilization." Areas where support facilities are located and other areas necessary for use during production will be reclaimed at the time of abandonment. Plates 3-6A through 3-6E show locations of current reclamation efforts and areas that will be reclaimed following cessation of operations.

C. EVALUATION OF COMPLIANCE

The applicant has planned to reclaim disturbed lands as soon as practicable following the end of their usefulness for coal production and will therefore comply with this section.

D. REVISIONS TO APPLICANT'S PROPOSAL

None

E. REEVALUATION OF COMPLIANCE

Not applicable.

F. PROPOSED SPECIAL STIPULATIONS WITH JUSTIFICATION

I. The applicant must perform reclamation activities covered by this section in accordance with the stipulations of section 817.111 through 817.117, Revegetation, in order to comply with revegetation requirements.

G. SUMMARY OF COMPLIANCE

Will comply if proposed stipulation is implemented.

H. PROPOSED DEPARTMENTAL ACTION

Approval with one stipulation.

I. ENVIRONMENTAL IMPACTS OF PROPOSED DEPARTMENTAL ACTION

Implementation of the proposed Departmental Action will insure timely reclamation of areas no longer used for coal production in accordance with sound revegetation practices. This action will provide for the rapid return of the land to vegetation and forage production.

J. RESOURCE ALTERNATIVES TO THE PROPOSED ACTION

There are no alternatives available which would provide for more rapid or successful reclamation and revegetation.

K. ENVIRONMENTAL IMPACTS OF ALTERNATIVES TO THE PROPOSED ACTION

Not applicable.

817.181 SUPPORT FACILITIES AND UTILITY INSTALLATIONS

A. DESCRIPTION OF EXISTING ENVIRONMENT

The Star Point mines have existed for many years. Therefore, surface facilities are already in place and operating in the loadout, Lion Deck Portal, Star Point Mine Portals 1 and 2 and Mud Water Canyon Portal areas. The applicant states that all structures are in compliance with Subchapter K, Section 817 of the OSM regulations and have been inspected and approved for compliance by Utah DOGM and OSM personnel (p 3-16). These structures include:

Lion Deck Portal area

- mine portal

- 120 x 60 ft., 350 man bathhouse

- office (with various small office buildings and warehouses)

- 46,000 V transmission line

- 46,000/13,200/4,160 V transformer

- 55 ft. diameter, 200 ft. deep hole

- 42 in. x 800 ft. underground belt conveyor

- 42 in. x 4,400 ft. covered, overland conveyor

Star Point Mine Portal Areas 1 and 2

- powerlines

- substations

- mine portals

- ventilating fans

- explosives magazine (1,000 ft. north of Portal 2)

Loadout Area

- 42 in. x 1,400 ft. conveyor to washing plant

- washing plant

- conveyor to loadout station

- loadout station

- power lines

- 2 substations

- 40 x 80 ft. offices

- 100 x 40 ft. shops

40x 60 ft. bathhouse
oil and gas storage
underground water reservoir
Mud Water Canyon Portal
ventilating fan
substation

B. DESCRIPTION OF APPLICANT'S PROPOSAL

The applicant does not propose to modify or reconstruct any of the facilities which currently exist.

The applicant does propose to construct a unit train, refuse disposal site extension, Seeley Canyon breakout and Gentry Mountain emergency escape and intake air shaft. The applicant has provided no plans for the construction of most of these facilities in the current permit application.

The applicant feels that the mining operations will not affect any oil, gas or water wells or any surface or subsurface manmade features within the permit area.

C. EVALUATION OF COMPLIANCE

The proposed sites for some facilities (i.e. unit train, refuse pile extension) are on lands for which the applicant has no access rights (Plate 2-1). These areas cannot be permitted with this application.

No information is provided on the designs or definite locations Gentry Mountain shaft area. These plans must be provided.

D. REVISIONS TO APPLICANT'S PROPOSAL

None.

E. REEVALUATION OF COMPLIANCE

Not applicable.

F. NECESSARY STIPULATIONS WITH JUSTIFICATION

1. Areas which the company does not have rights to will not be permitted with this application.

2. The applicant must provide designs and definite location information for the Gentry Mountain shaft in order for a determination to be made of the possible effects of the construction on fish, wildlife, other environmental values and streamflow or runoff outside the permit area (817.181).

G. SUMMARY OF COMPLIANCE

This section, with stipulations, will comply.

H. PROPOSED DEPARTMENTAL ACTION

Approval of this section of the mine plan with stipulations.

I. ENVIRONMENTAL IMPACTS OF PROPOSED DEPARTMENTAL ACTION

The impacts of departmental approval will be minimal since the mine and most of its support facilities have been in existence for some time. The stipulations allow for the new structures to be evaluated by the department.

J. RESOURCE ALTERNATIVE TO THE PROPOSED ACTION

There is no alternative which is logically or financially justifiable.

K. ENVIRONMENTAL IMPACTS OF ALTERNATIVE TO
PROPOSED ACTION

Not applicable.