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United States Department of the Interior
OFFICE OF SURFACE MINING
Reclamation and Enforcement
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DENVER, COLORADO 80202

OFFICE OF THE REGIONAL DIRECTOR

File & Copy to
Mary Ann & Gil
ACT/041/002

Jim

(Also, copy to Lee,
Wayne, Tom, Sally)

APR 2 1981

Mr. James Smith, Jr.
Coordinator of Mined Land Reclamation
Utah Department of Natural Resources
Division of Oil, Gas and Mining
1588 West North Temple
Salt Lake City, Utah 84116

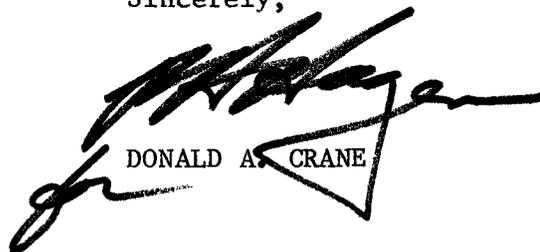
#3

Dear Jim:

We have reviewed Coastal States Energy Company's Convulsion Canyon Mine Plan addendum submitted on December 15, 1980. Attached are the results of that analysis which suggest the need for additional technical information. As discussed with you, we have initiated a TEA to be prepared for your review. In order to maintain a schedule for completion of the TEA, we would like to get responses to these identified needs as soon as possible. It would be most helpful if you could review and communicate these needs to Coastal States soon.

If questions arise, please have your staff contact Mark Humphrey (303-837-2451).

Sincerely,


DONALD A. CRANE

Attachment

RECEIVED

APR 6 1981

DIVISION OF
OIL, GAS & MINING

Completeness Review

This completeness review describes the information still needed for the technical and environmental analysis of the Convulsion Canyon Mine.

- 783.12 Applicant must submit letters of concurrence from the appropriate State Archaeologist's Office and State Historic Preservation Officer documenting the lack of NRHP sites within the mine plan area and agreement regarding mitigation procedures for endangered sites.

Applicant must submit readable copies of the site forms. The top of each page is cut off and the site number cannot be read.

Applicant must submit a statement relating the results of the survey with the research objectives.

There are a variety of minor omissions from the archaeological report which will be detailed in the final TEA.

- 783.13 There is no discussion concerning direction of ground water flow and possible discharge areas.

- 783.14 Lithologic logs of the observation wells installed to date are not presented.

- 783.15 An estimate of recharge to the various aquifers was not presented. An overall hydrologic balance of the ground water system was not presented i.e., recharge, mine pumpage, spring discharge.

- 783.19 The applicant should provide in the plant community description section, the acreage calculations for each major vegetation type in the affected area and in the reference areas.

The "statistically acceptable techniques" to be used in determination of percent cover and vegetation composition in revegetated disturbed area (p. 37, Vegetation and Soils, Volume 4) should be specifically indicated by the applicant.

The applicant should submit standard deviation data which correlate with the mean species cover and production data for each plant community.

The applicant has indicated only Site 12 (pages 75-76, Report of Studies of Vegetation and Soils, Volume 4, Mine Plan Application) as a vegetation reference area. Site 12 includes the Pinyon/Juniper vegetation community at a sedimentation pond site. The applicant must establish and describe adequate reference areas, indicate their locations on a map, and submit reference area data for cover, productivity, and shrub/tree density for each vegetation community. The applicant should also clearly indicate the status of vegetation reference areas with respect to a grazing plan and restrictions.

- 783.21 The soils analysis should include the saturation percentage; if not available, a statement to that effect should be made.

No productivity data for the various soils, either present or potential was found. An association between vegetation communities and soil should be provided.

783.25 The precise locations of the air quality monitoring stations should be plotted on one of the topographic base maps in order to facilitate the Technical Analysis phase of this review.

784.11 a) Explosives. The applicant should clarify whether or not any surface blasting will occur as part of the operation. If none will occur the explosives sections is complete. If surface blasting will occur a narrative description of the surface blasting procedures must be submitted that demonstrates how the applicant will comply with 30 CFR 817.61 through 817.68.

784.13 In the 1980 Vegetation and Soils study (Volume 4), several conclusions and recommendations were made. The applicant should address the following statements which were made in this report and verify what is to be actually performed.

a) A list of only native species was recommended on pages 35-36 of the Vegetation and Soils study to be used for the revegetation mix. This list is in contradiction with those species proposed for revegetation in the 1979 Mine Plan submission (Volume 2, pages 53-54). The applicant needs to clarify what seed mixture, seedlings, or transplants will be used for revegetation. Also, indicate the rates of application (as pounds pure live seed per acre), and the species, subspecies, and scientific name for each species in the mixture. The applicant should also address if specific revegetation seed mixtures will be utilized for different situations, including steep areas, mesas, along drainages, around sedimentation ponds, topsoil piles, and any saline, alkaline, or sandy soil areas. The applicant must also address if any introduced species (such as Yellow Sweetclover) is to be used in revegetation. The applicant should demonstrate that each introduced species to be utilized is necessary for controlling erosion, consistent with the approved postmining land use, compatible with native plant and animal species, and not poisonous or noxious.

b) On page 36 of the Vegetation and Soils study, a recommendation is made that reclamation on steeper slopes (1.5:1 or steeper) be accomplished without application of topsoil. In the 1979 Mine Plan submission, topsoil was to be spread at a one-inch minimum depth. The applicant should clarify plans for topsoil redistribution and should substantiate that no harm will be caused to vegetation with a topsoil thickness of less than six inches. The applicant should also provide clarification as to the source, quality, and quantity of additional topsoil needed for revegetation. The applicant should also address what amount of fertilizer will be used, since 150 lb/acre was proposed in the 1979 Mine Plan submission and 100 lb/acre was recommended in the 1980 Vegetation and Soils study.

c) With respect to both the reference areas and the affected area, plans for fencing and a livestock grazing management plan should be addressed by the applicant.

d) Shrub and subshrub density data should be provided in the applicable tables of the 1980 Vegetation and Soils study. The applicant should indicate the tree, shrub, and subshrub species, stocking rates, and mapped planting locations to be utilized for wildlife habitat.

e) The proposed schedule of revegetation seeding (page 35, Vegetation and Soils, Volume 4) is too general in its reference to spring, summer, and early fall plantings. The schedule should be more specifically discussed.

f) More specific information needs to be submitted with respect to mulching techniques. The rates of application, the type of mulch, and areas of use should be specifically discussed. The applicant should also address if temporary cover crops will be used, providing specific details about the type of crop, application rates, locations where utilized, and that the cover crops will not adversely affect revegetation efforts.

g) The applicant should address if irrigation and/or pest and disease control will be utilized in revegetation efforts. If either is used, the applicant should discuss the details which will be utilized.

h) The applicant should include sufficient discussion that a perennial vegetation cover will be established within a year of the final regrading of topsoil, how this will be accomplished, and whether a cover crop will be used between the time topsoil is prepared and the perennial seed mixture is used.

784.14 a) A description of potential quantitative changes in ground water recharge and discharge are not presented.

b) The postmining reclamation plan (Exhibits 11 and 12) shows final stream restoration for East Spring Canyon. The applicant proposes to restore the channel over the fill at a slope of 17.5 percent for approximately 1,600 feet. The applicant has estimated the peak runoff resulting from 100 year precipitation event to be 761 cubic feet per second. The use of riprap as proposed by the applicant will not provide long-term stability for the stream channel. The applicant must demonstrate that the stream channel will be stable or that a permanent maintenance plan will be implemented for the stream channel.

- 784.15 The applicant should submit statements of confirmation that the proposed postmining land use is consistent with the surface owner plans and the local land use plan and programs.

The applicant needs to describe how the postmining land use will be achieved and the support activities which will be necessary to achieve the postmining land use.

- 784.18 Maps and cross sections of the East Side Road and Mine Access Road should be submitted. Vertical and horizontal alignments should be shown.

- 784.21 The fish and wildlife plan has a number of inadequacies which must be addressed by the applicant. These inadequacies are discussed in the following paragraphs.

In the wildlife Section of the 1979 Mine Plan submission (Volume 2, page 44) the applicant has discussed the possibility for enhancement of wildlife habitat. However, the applicant needs to specifically address how this enhancement will be accomplished. The applicant should submit in a discussion and map specific plans for shrub/tree stocking, including a verification of the proposed revegetation plant species, stocking rates, and locations of the stocking areas. The applicant should also indicate if shrubs and trees will be stocked in the vicinity of ponds or impoundments (and other areas) for wildlife. The applicant should verify and discuss plans for fencing in the vicinity of impoundment and other areas, roads, and migration routes with respect to wildlife and domestic grazing use.

In the Wildlife Section of the 1979 Mine Plan submission, four methods are discussed (page 45, Volume 2) for possibly controlling public recreational use in the mining area. Four measures are also discussed for enhancing wildlife habitat away from the mine area (page 45) with the coordination of appropriate regulatory agencies. The applicant needs to specifically update each of these potential recommendations and verify which will be actually done.

In the 1980 Wildlife Assessment Report (Volume 4, pages 1-63) various recommendations were made with respect to wildlife mitigation. The applicant needs to verify which recommendations will be incorporated into the Fish and Wildlife plan and how they will be accomplished.

The applicant should address in more detail the plan to prevent, control, and suppress range forest and coal fires.

The applicant should discuss if new electric power lines and other transmission facilities are to be built. If so, will they be designed and constructed in accordance with the documents cited in 817.97(c)?

784.26 There is no listing of any fugitive dust emission permit in the application.

Summary of Major Deficiencies for Cultural Resources

- 1) 180 acres were reported surveyed as a 10% sample of areas to be impacted by subsidence; however, the mine plan states that approximately 5,230 acres will be affected or disturbed, not 1,800 as stated in the survey report. If the total area surveyed, including access roads and seismic lines, but excluding drill holes, is less than 10% an additional sample survey must be performed to complete the 10% of the area that may be impacted, and the information added to the existing report.
- 2) The areas in the canyons that will be broken out for ventilation entries need to be surveyed, and the information added to the existing report.
- 3) An explanation of sampling strategy is needed of why the size, shape, and placement of surveyed areas was chosen; i.e., why nine 20-acre plots instead of 20 nine-acre plots?
- 4) A statement of ground visibility and vegetative cover must be provided, as it relates to the potential for unknown sites.
- 5) Legal descriptions for sites 1435, 1436, 1437, 1438, 1439 and 1440 do not agree with map locations. Furthermore, the site number has been cut off site forms for 1439, 1440 and 1441 and the end of the legal description cut off 1439 and 1440. UTM grid locations are needed for all sites.
- 6) Site maps are needed for sites 983 and 984. Clear photographs or drawings are needed for site 1440. The remaining site maps need to be redrawn with scales to show details of site, not just area of topographic location. Photos of sites need to be discernable, especially for site 1440.
- 7) The stated research goals need to be related to the resources located by survey.
- 8) Possible impacts to cultural resources must be discussed in a consistent fashion. Table 7 indicates all known sites may be impacted by the effects of subsidence. Yet on p. 43 it is stated ". . . the potential for direct impact of these types of sites is considered to be nil." One site (1435), however, is a rock shelter (considered a susceptible site) with a CRRS-S2 designation. What is the potential for impacts?
- 9) National Register eligibility statements are inconsistent. Several sites are assigned an S2 or S3 designation, which by definition makes them eligible for nomination to the National Register. Yet no recommendations to this effect are made; in fact it is stated that none are eligible. This is very contradictory. If, on the other hand, no sites are eligible, no further mitigation measures (avoidance, testing for eligibility) are necessary. Consistent statements of eligibility, determinations of impact (see 36 CFR 800) and recommendations for further mitigation of adverse impact are needed throughout the survey report, including site forms. We would also recommend dropping the use of the CRRS system, as BLM no longer utilizes the system, and it leads to confusion in recommendations of eligibility of sites to the National Register, pursuant to 36 CFR 60.6.

10) According to the site forms, artifacts were collected from a National Forest. Is this permitted? What is the Forest Service Permit Number and expiration date? Why is it stated in B. Laboratory Research that artifacts were not collected? Inconsistencies need clarification.

11) P. 16 ". . .no Paleo-Indian sites or materials have been discovered in the project area."

P. 38 "The Plano phase of the Paleo-Indian period is shown in the Cascade bipooint collected in 1976."

This inconsistency needs clarification.

12) Sites need more interpretation--ceramic analysis, diagnostic artifact analysis, and site size (dimensions and/or m²). Additional discussion of Fremont ceramics is necessary.

13) Since much of the survey was on Forest Service administered lands, comments from the Forest Service regarding this report should be included in the mine plan.

14) Reports detailing all previous surveys in the mine plan area should be included in the mine plan.

15) A more thorough statement on the local significance of the Addley Monument (42Sv1440) would be helpful for an eligibility determination. Documented conversations with local informants and consultation with the SHPO would help OSM in reaching a decision.

All the above deficiencies will need correction before the mine plan can be considered complete and OSM can begin consultation with the SHPO pursuant to Section 106 of the National Historic Preservation Act of 1966 and 36 CFR 800. Items 1 and 2, however, could be completed after approval of the mine plan.