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File ACT/015/017
UT0015

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

Manti-LaSal National Forest
599 West Price River Drive
Price, Utah 84501

2820

July 7, 1981



Mr. John Nadolski
OSM - Reclamation and Enforcement
Brooks Towers - 1020 15th Street
Denver, Colorado 80202

Dear Mr. Nadolski:

The Forest Service has reviewed a copy of the Mine Permit Application for Utah Power and Light's Des-Bee-Dove Mine. Our comments are enclosed. We hope they will be beneficial to those Federal, State, and local agencies involved with the mine permit.

If there are any questions, please contact us.

Sincerely,

for
REED C. CHRISTENSEN
Forest Supervisor

Enclosure



COMMENTS

Page 1-8

"Owners of surface lands contiguous to the permit area." The Forest Service is a land management agency.

Page 1-9

"The completion of this exchange is still pending, and may include some areas, as yet undefined, contiguous to the permit area." An official ruling was published in Coal News June 22, 1981. Cottonwood and Meetinghouse tracts will be offered for competitive sale late July 1981.

Page 2-57

"Generally, this area is a flat-topped mesa..." A mesa is defined as flat-topped.

Page 2-59,

"The Des-Bee-Dove mines have intersected three north-south trending faults." What is the effect of these faults on mining?

Page 2-60

"These formations in ascending order are the Masuk Shale..." The Masuk Shale is a member and not a formation.

Page 2-61

"Locally, the Starpoint Sandstone exhibits aquifer characteristics." What are these parameters?

Page 2-65

"These samples consisted of a representative section of core averaging 0.3' in length usually taken from the center of each lithologic unit." How can such a short piece of core be representative? A definition of lithologic correlation is the matching up of identical rock formations, veins, or coal seams exposed some distance apart.

Page 2-69

"This data collection program is part of a hydrologic monitoring program which has been approved by the Utah State Division of Oil, Gas, and Mining as being in compliance with the OSM regulations." D.O.G.M. may have given their formal approval, but the Forest Service has not. The hydrologic monitoring program is directly related to the subsidence monitoring program. The Forest Service will analyze the data from both programs for several years before making a judgement on if the programs meet our needs.

Page 2-71

"This fact plus the fact that the Starpoint is only slightly to moderately permeable allows only limited flow of groundwater through this formation."

"Generally, when holes are drilled through the overlying strata into the Starpoint Sandstone, water, if present, flows out of the bottom of the drill hole through fractures..." These two sentences do not substantiate each other.

Page 2-79

"The high concentration of suspended solids indicates an eroding condition present at this time." Why, and what is being done to alleviate the problem?

Page 2-84

"It is expected that these high values would be reduced to nearly zero during low flow conditions..." What about followup?

Page 2-88

"If the mining activities affect the surface waters, waters from adjacent springs may be diverted to flow into the areas where other springs may have stopped flowing." A complete list of springs and their geologic parameters is needed.

Pages 2-107 and 2-108

"The disturbed area is about two acres." Should this be 20?

Page 3-2

"Results of the study will be submitted to the regulatory authority when they are complete." What is the time frame for completion of this project?

Pages 3-16, 3-18, 3-20, 3-21, 3-26, and 3-36

"Concrete foundations will be removed, broken up, and used for coarse backfill." Where?

Page 3-19

"Non-coal wastes are collected periodically from trash bins and tippie trash piles, and disposed of in a State-approved disposal area." Is this area on National Forest lands?

Page 3-21

"Asphalt will be broken up and used for coarse backfill..." Where?

Page 3-28

"A potentially stable source of mine water has recently been tapped through Deer Creek Fault..." This indicates that the fault through the Blackhawk is not resealing itself.

Page 3-30

"For reclamation, the sewer line will be sealed and remain in place. The septic tank will be sealed off and abandoned." Is this not a potential health threat?

Page 3-44

"Hydrological assumptions and calculations..." This section needs to be more detailed, what formulas were used? Any references?

Page 3-48

"Applicant is installing an alternate underground water supply from the Wilberg Mine workings and expects to have it completed by June 1981." Has it been completed now? What is proposed and what has been completed?

Page 3-49

"Methods used to construct this fill do not necessarily meet stated design standards of Section 817.81...structure qualifies as a pre-existing structure with exemption from design requirements if structure can demonstrate compliance with the performance standards of Subchapter K." Does this fill structure demonstrate a compliance with the performance standards of Subchapter "K"?

Page 4-7

"Hydrological controls will be installed to maintain water quality, and the surface will be revegetated." What controls will be implemented besides riprap? What class size of riprap?

Pages 2-100 and 4-13

"Hot spots that are identified shall be neutralized or covered as with toxic subsoils and areas of high iron content." The plan was to neutralize and remove. If their occurrence is due to mine related activities, they should be disposed of properly.

Pages 4-13 and 4-18

"All disturbed areas will be graded to the most gradual slope possible." What about resotring as feasibly possible to original contour?

Page 4-17

"It is highly unlikely that mining will have any effect on the hydrologic regime of this area." Subsidence could affect any groundwater migration in the area.

Page 4-19

"A key element of the reclamation plan as envisioned, is the leaving of the road system as is to allow greater use of the area by the general public..." "A protective barrier will be placed across the dirt road to prohibit casual users of the area from proceeding further than the mine area." These two statements need clarification.

Page 4-19

"Maintenance of the road system will be divided." Geographic areas are mentioned, but what about cost sharing?

Is there a map which shows the relationship of seeps, springs, and surface structures, the area within the angle of draw, mined out areas, and projected mining?

Page 4-23

"...thereby limiting the extent of material damage to those lands and causing no appreciable change to present land uses." Only time and a continual subsidence and hydrologic monitoring program will determine this.

Page 4-24

"This alignment with respect to jointing will prevent the formation of irregular sawtooth subsidence works in the overlying surface lands." However, this alignment could enhance the amount of subsidence.

Page 4-25

"...together with water generated within the mines for some three years to date and has set up an organization with the full intention of monitoring them for the next several years." Monitoring will be done for at least the life of the mine.

Page 4-25

"The hydrologic report indicates that mining under the seeps and springs at the depths of cover of Des-Bee-Dove Mine, up to 1,600 feet does not dry up the seep or spring." Some faults which cut across the Blackhawk Formation act as a pathway for groundwater migration. How long will it take for the breached confined aquifers to seal themselves and become fully recharged?

Page 4-26

"In lieu of renewable insurance covering damages to existing structures, a bond has been secured through the District Courts for that purpose." A copy of the bond and what it covers should be included with this mine plan permit application.

Page 4-29

"To reduce the undue disturbance and billing of wildlife, an education program for employers could be developed..." When is this program to be implemented?

Volume 3

V-1

"Colluvium is conglomeratic..." Colluvium is inconsolidated material and not cemented. Conglomerate is a rock type which has been cemented. Be more careful with usage of geological terms.

V-2

"Soils on the proposed site are from the same outwash material..." Outwash refers to a type of material deposited on the perimeter of a glacier. Be more careful with usage of geological terms.

V-2

"The hydrology of the site is limited to surface water." What about groundwater?

V-4

"Should the inspection identify a need for repairs, repairs will be made as requested by the inspector." Who would furnish the inspector.

V-5

"The proposed design includes procedures for protecting the hydrologic balance on the site." What is the hydrologic balance for the site area?

XII-A-1

"Subdrainages were evaluated and delineated based on direction of flow, slope, aspect, vegetative cover, and soil hydrologic group." Acreage of each subdrainage and watershed was determined using a polar planimeter." A detailed explanation is needed for the above mentioned watershed characteristics description is needed for each watershed/subwatershed. Otherwise, the map is not that useful.

XIII-1

"The monitoring plan proposed was originally submitted on December 30, 1977. As of this date, no approval has been given." The Forest gives concurrence to the subsidence and hydrologic monitoring plans. Through mutual agreement between UP&L and the Forest Service, UP&L would try their own monitoring plan for several years, to see if it proves out to meet the needs of the Forest Service.

The Forest Service requires a copy of the aerial photographs along with a map which should present mine workings, projected mine workings, and all springs and seeps within the angle of draw. Also, the horizontal and vertical control is needed for the monuments. This applies to the Wilberg, Deer Creek, and Des-Bee-Dove Mines.

Map 2-11

The Castlegate Sandstone, Blackhawk Formation, Starpoint Sandstone, and Masuk Shale was left off the geologic map. There is no coal outcrop boundary line. What are the effects of the faulting to mining?

Map 4-1

This map portrays the final contour for reclamation. A map of the same scale is needed which depicts the disturbed areas prior to any surface disturbance.