



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII  
1860 LINCOLN STREET  
DENVER, COLORADO 80295-0699

FILE ACT 019 015

APR 01 1982

FINDING OF NO SIGNIFICANT IMPACT

To All Interested Government Agencies and Public Groups:

As required by the EPA Regulation, "Preparation of Environmental Impact Statements (EISs) for New Source NPDES Permits" (40 CFR 6.900), an environmental review has been performed on the proposed EPA Action below:

Applicant: Consolidation Coal Company (Consol)  
Location: Emery, Utah  
EPA Action: Issuance of a New Source NPDES water discharge permit  
Application No. UT-0024040

Consolidation Coal Company has proposed to construct and operate a coal preparation plant near Emery, Utah in Emery County. The proposed project will clean coal from the existing underground mine. The cleaned, low sulfur coal will be used primarily for generation of electricity. The coal will be transferred by truck to two different rail loadout facilities for shipment. The anticipated production of clean coal from the plant at full capacity is 2.6 million tons per year. The project life of the plant is 27 years. The facility will operate five days a week. Coal haul transport will take place twenty-four hours per work day. The facility will employ approximately 40 people. From 20-25 of those people will be hired from the regional labor pool (the rest are currently working at the Emery Mine).

Facilities proposed to be developed include:

- coal preparation plant
- raw coal storage areas
- clean coal storage areas
- conveyor and coal transfer buildings
- haul roads
- diversion structures
- sediment control pond (existing)
- coal refuse disposal areas

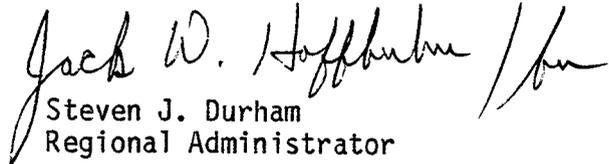
Approximately 207 acres of land will be disturbed by construction and operation of the facility. Some wildlife and vegetation habitats will be destroyed. Local topography will be permanently altered. Emissions and water discharges will meet New Source Performance Standards determined for this industrial category.

The review process indicated that no significant environmental impacts are expected from the proposed facilities, consequently, a preliminary decision not to prepare an Environmental Impact Statement has been made.

This decision has been made on the basis of a careful review of the environmental information and other supporting data which are on file in the office listed below and are available for public scrutiny upon request. This Agency will not take any administrative action on the project for at least 30 days from the above date.

Written comments on this decision may be submitted for consideration by USEPA. Comments should be addressed to:

Samuel Berman, Chief  
State Program Management Branch  
Environmental Protection Agency  
Region VIII  
1860 Lincoln Street  
Denver, Colorado 80295

  
Steven J. Durham  
Regional Administrator

## ENVIRONMENTAL IMPACT ASSESSMENT

### A. Project Identification

Name of Applicant: Consolidation Coal Company (Consol)  
2 Inverness Drive East  
Englewood, Colorado 80110

Type of Facility: Coal preparation plant

Location: Approximately 3 miles South of Emery, Utah  
(See Figure 1)

### B. Project Assessment

#### 1. Brief Description of the Project:

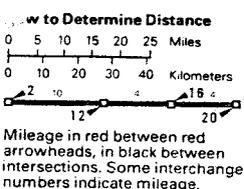
The applicant proposes to construct and operate a coal preparation plant near Quitchupah Creek in Emery County, Utah. See Figure 2 for project layout. The preparation plant will process approximately 2.11 million tons of raw coal in 1983. This rate will increase to approximately 2.89 million tons in 1986. Ten percent of the raw coal will become waste materials with the rest being cleaned, low sulfur coal. The plant will operate about 13 hours per day in 1983 and will increase to 18 hours in 1986. It will operate five days per week, fifty weeks per year. Coal haul transport will take place twenty-four hours each work day. The plant life is expected to be 27 years.

The preparation plant will be located four miles north of Interstate 70 near Utah State Highway 10. Coal will come from the existing Emery underground mine and will be transported to the plant by enclosed conveyor. Clean coal will be transported by truck to rail loadout facilities located near Price and Salina. Coarse coal refuse will be transported by scrapers to a disposal dike approximately 2 1/2 miles west of the plant. Waste fines will be piped to a slurry pond. Clean water will be recovered from the slurry pond and returned to the plant for reuse.

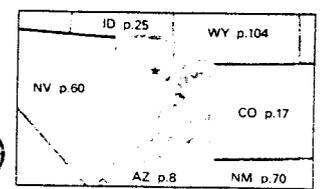
Fugitive dust control measures using water are planned for all unpaved roads on the project site. During periods of dry weather, the roads will receive water applications as conditions warrant or as determined necessary by the Utah Department of Health. Water will be used to control fugitive emissions on all storage piles.

Between Principal Cities

Evansville	Wyo	Moab	Ogden	Price	Richfield	St. George	Salt Lake City	Vernal	Wendover
306	329	289	281	236	205	111	54	247	353
329	102	321	46	207	129	239	383	79	253
281	73	46	270	156	78	186	335	34	207
205	101	129	192	78	78	112	259	45	156
247	78	79	239	34	123	45	153	301	171



- Selected Recreational & Historical
- Arches National Park, I-11
  - Bryce Canyon National Park, L-6
  - Canyonlands National Park, J-10
  - Capitol Reef National Park, J-8
  - Cedar Breaks National Monument, L-4
  - Dinosaur National Monument, E-11
  - Golden Spike National Historic Site, B-5
  - Zion National Park, M-4



Area: 82  
 Population:  
 Highest:  
 Capital:  
 Largest:  
 Index pa

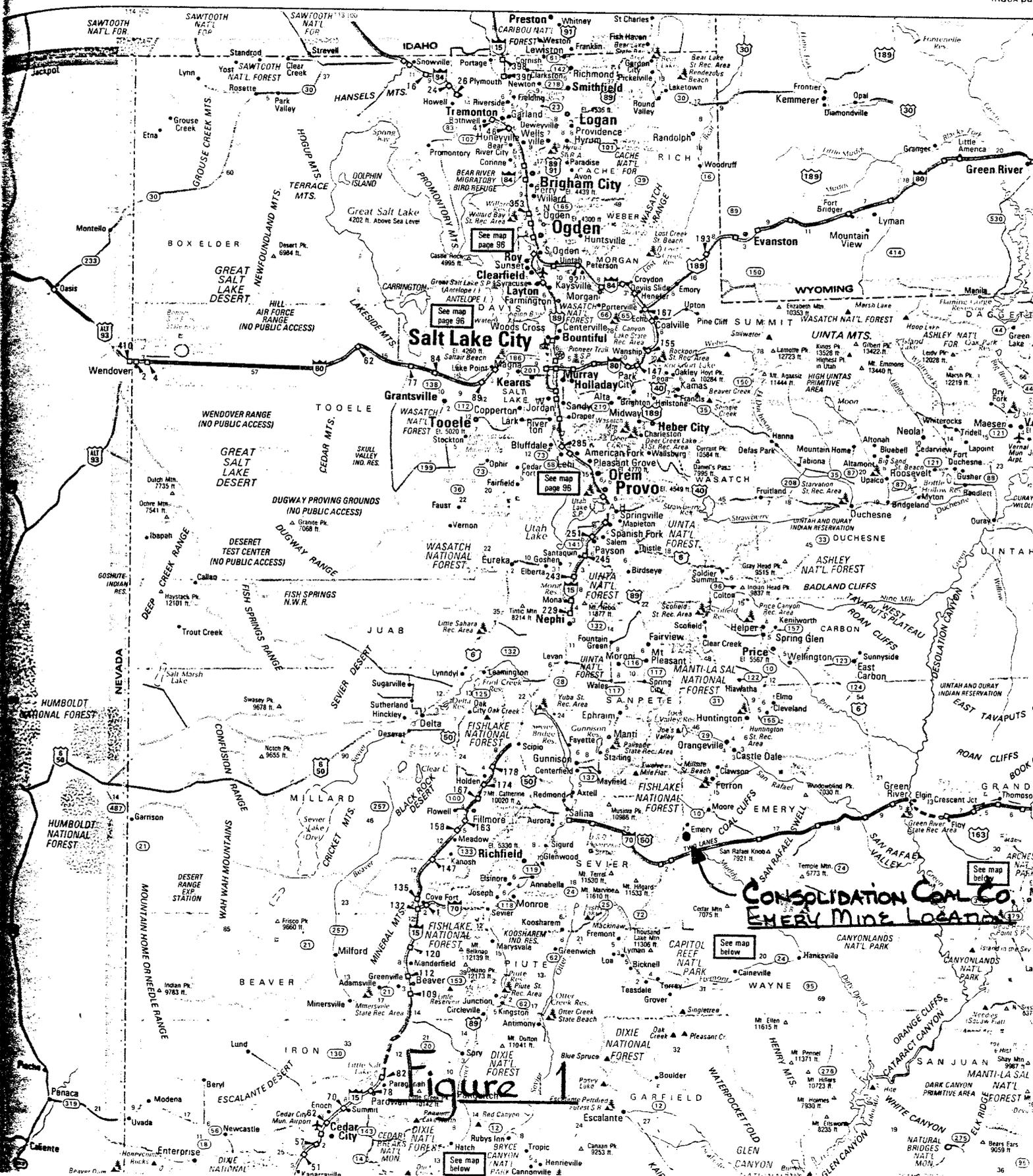
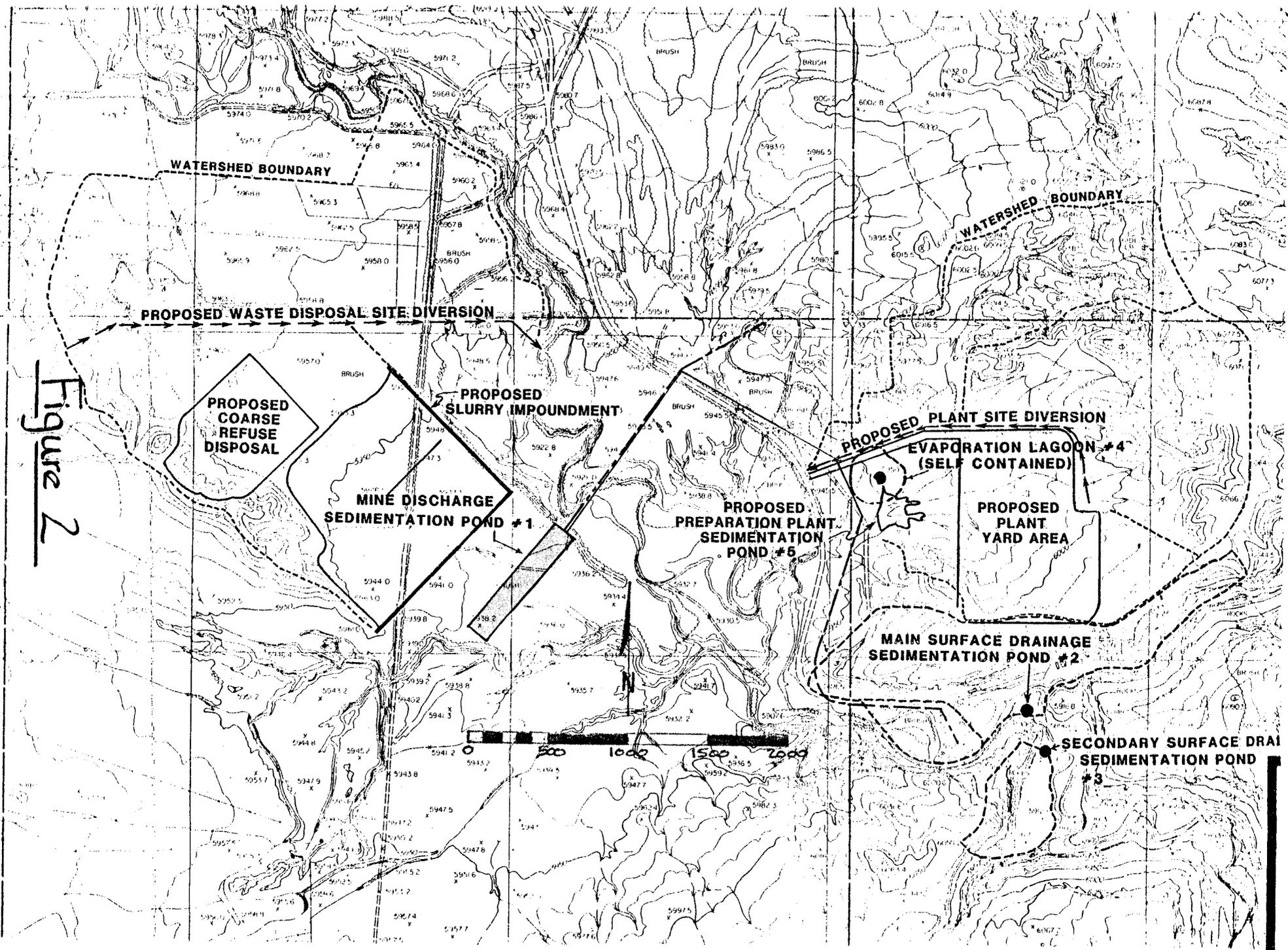


Figure 1

Consolidation Coal Co.  
 Emery Mine Location

Figure 2



In addition to the plant and waste disposal areas, the project will consist of coal transfer buildings, various conveyors, raw and clean coal stockpiles, runoff and sediment control structures, slurry and make-up water pipelines, and roads. See Figure 3 and 4 showing detailed layout of the project. The plant will consist of raw coal washing and crushing facilities and a waste (refuse) disposal system. Water for the facility will be pumped from the slurry cells and the existing mine discharge sedimentation pond. The applicant is in the process of converting to a domestic well to provide water for the plant's employees. Currently, a portion of the water inflow to the mine is being treated and used by employees.

Surface runoff and drainage will be controlled by diversion ditches, a sediment pond and slurry cells. All drainage from disturbed areas will be routed to the sediment pond for treatment before being discharged into Quitchupah Creek. Treatment will consist of settling of particulate matter in the ponds to meet both effluent guidelines criteria for discharge quality and water quality standards for the receiving stream. Any discharges will be monitored in accordance with NPDES permit standards and State and Federal regulations.

The project site and related roads, pipelines, and other facilities will all be on private lands. This environmental assessment does not imply State of Utah approval of the project.

## 2. Brief Background on the Project:

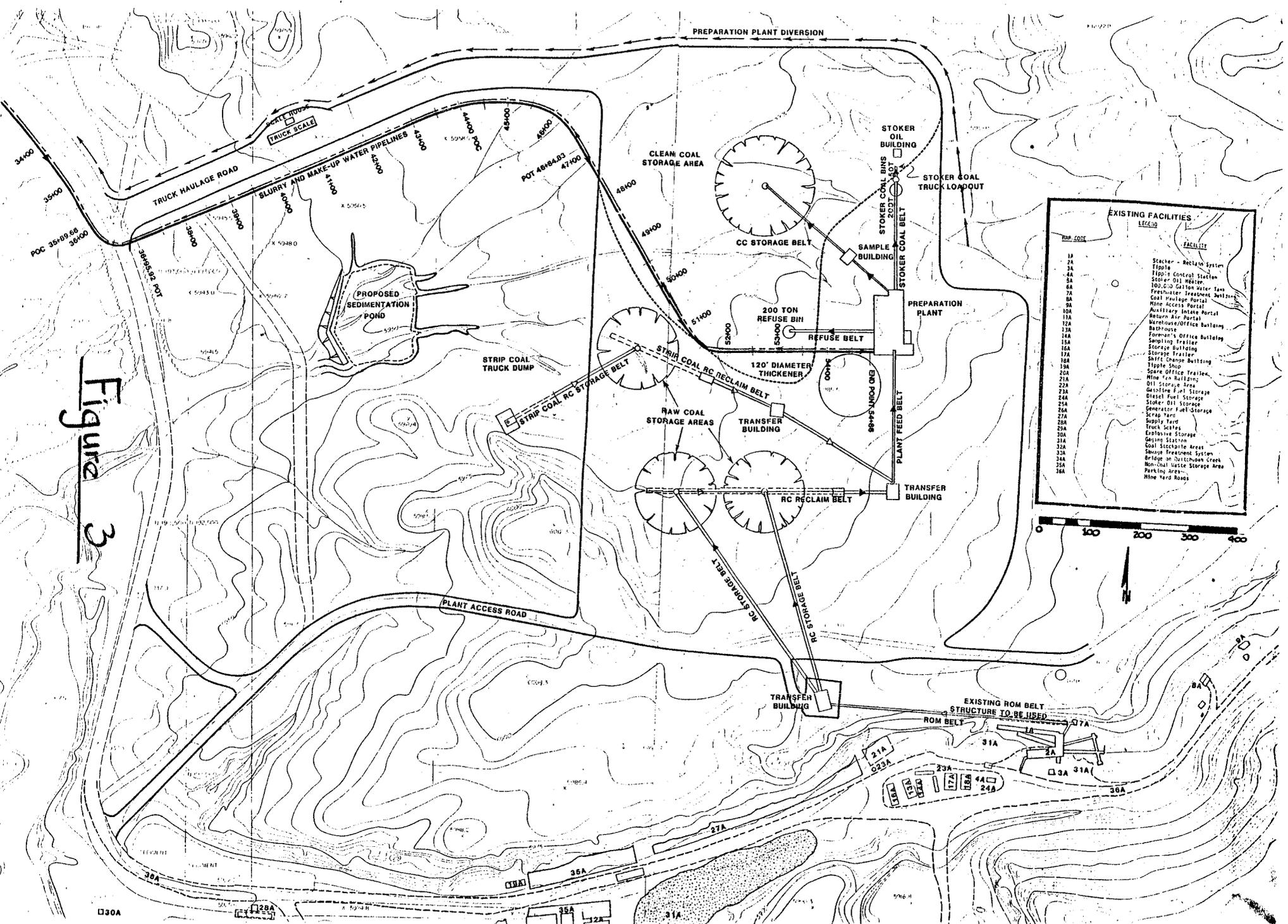
The Emery Mine is located near the confluence of Quitchupah Creek and Christiansen Wash approximately 3 miles south of Emery, Utah and 4 miles north of U.S. Interstate 70. There has been an underground mine at this location for more than 100 years going back to the historic Browning Mine. In 1881 the Browning Coal Company opened the mine in Christiansen Wash and produced coal on an intermittent basis until 1930. From 1931 to the present, the mine has been in constant operation and presently produces about 1,000,000 tons of coal per year.

The proposed preparation plant will be located above the canyon wall north of the existing facilities. The proposed preparation plant is required because the existing plant is only a crushing facility and does not wash the coal. Future quality projections indicate that the unwashed crushed product will not meet contract specifications; the proposed preparation plant will allow continued operation of the mine. Two roads will access the plant: a coal haulage road will be the primary route for exporting coal from the plant; a smaller road will provide employee access.

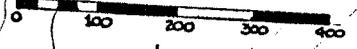
## 3. Affected Environment:

The annual mean precipitation recorded at Emery is 7.22 inches. The annual rainfall in the immediate area ranges from 8-10 inches per year. Cyclic precipitation peaks in winter usually in the form of snow; the conventional precipitation in the summer is often torrential. The snowfall ranges from an average of 16 inches annually along the eastern portion of the Emery Coal Field to 12 inches per year along the coal field's western portion.

Figure 3



ROM CODE	FACILITY
1A	Stacker - Reclaim System
2A	Tipple
3A	Tipple Control Station
4A	Stoker Oil Heater
5A	100,000 Gallon Water Tank
6A	Preheater Treatment Building
7A	Coal Haulage Portal
8A	Coal Haulage Portal
9A	Mine Access Portal
10A	Auxiliary Intake Portal
11A	Return Air Portal
12A	Warehouse/Office Building
13A	Bathhouse
14A	Foreman's Office Building
15A	Sampling Trailer
16A	Storage Building
17A	Storage Trailer
18A	Shaft Change Building
19A	Tipple Shop
20A	Spare Office Trailers
21A	Mine Fan Building
22A	Oil Storage Area
23A	Generator Fuel Storage
24A	Diesel Fuel Storage
25A	Stoker Oil Storage
26A	Generator Fuel Storage
27A	Scrap Yard
28A	Supply Yard
29A	Truck Scales
30A	Explosive Storage
31A	Gauging Station
32A	Coal Stockpile Areas
33A	Shoove Treatment System
34A	Bridge on Dutchman Creek
35A	Non-coal Waste Storage Area
36A	Parking Area
37A	Mine Yard Roads



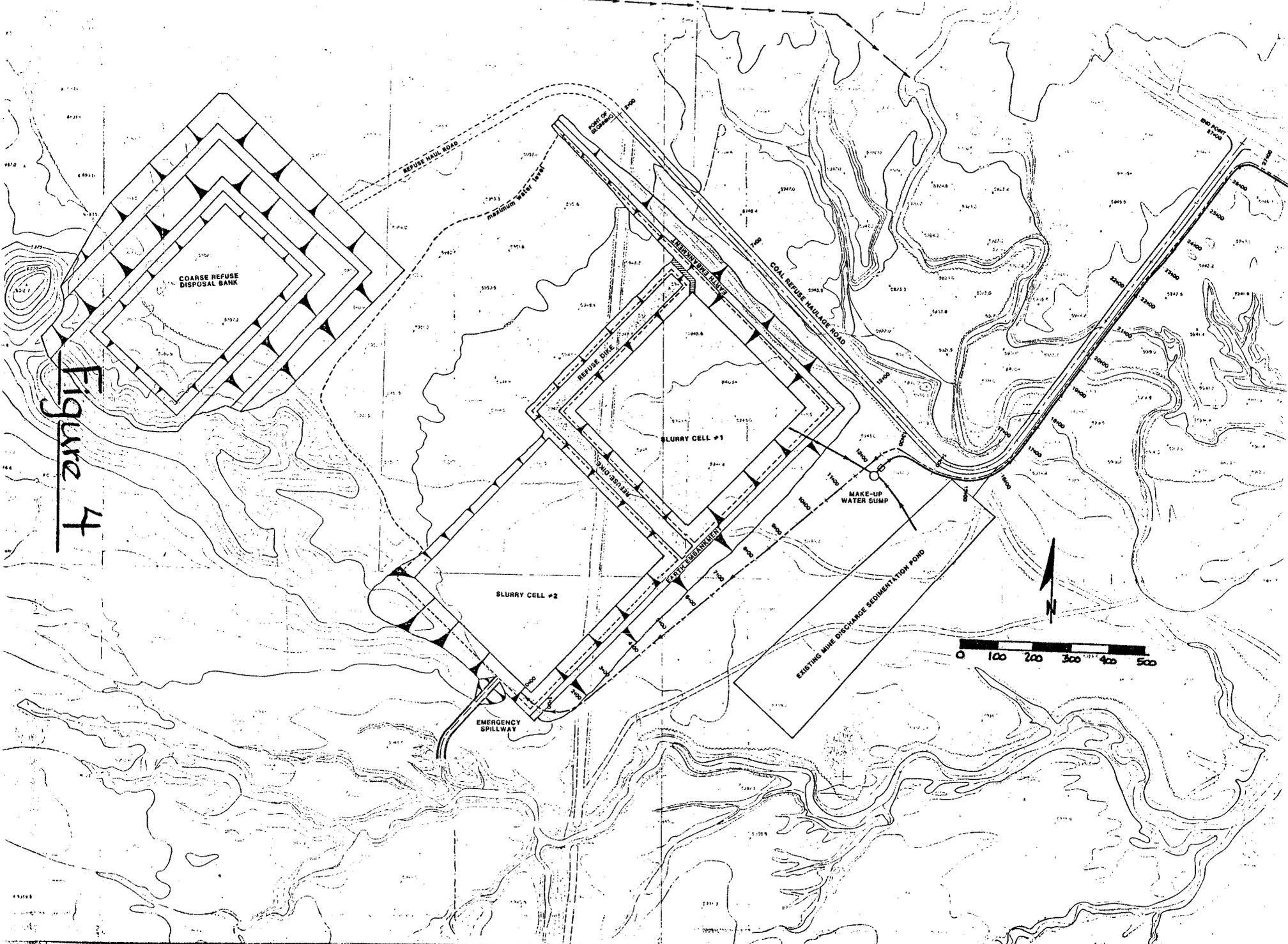


Figure 4

The vegetation to be disturbed is described as "greasewood shrubland", "annual forb community", and "mixed desert shrubland" types.

Thirteen soil types will be affected by the project. The soils vary in depth and quality. The refuse disposal area is underlain by alluvial materials which may reach a thickness of 60 feet. The alluvial materials consist of clay, silt, sand and gravel, as well as floodplain and stream deposits. Specific soil types include sandy silt, silty sand, sandy gravel and clay.

Bluegate Shale underlies surficial, unconsolidated deposits near the disposal area. The shale varies from 101 feet to 175 feet thick beneath the refuse disposal area and thins toward the southeast before it contacts underlying Ferron Sandstone. Quarternary colluvial deposits composed chiefly of debris from sheet erosion and slope wash occur between the bedrock outcrops south of the disposal area.

#### 4. Alternatives Considered:

The applicant considers the proposed project site to be the most appropriate to meet it's operating needs and therefore no alternatives were considered by the applicant. EPA believes that the proposed site is the most feasible for several reasons including proximity to transportation and existing mine facilities, and favorable topographical features. Other alternatives were considered by EPA, but no significant differences in impacts are expected provided adequate mitigative measures are implemented.

A no action alternative would mean that the applicant would not be able to provide coal of the quality required by it's customers. The applicant would not be able to maintain mining operations.

#### 5. Impacts of the Project on the Environment:

- a. Quitchupah Creek will receive effluent discharge from the proposed sediment pond, and the existing mine discharge sedimentation pond. An emergency spillway will be provided to allow a bypass of flows from the slurry cells in case of extreme precipitation. Sizing of slurry cells and spillway is based on the probable maximum storm event. Slurry cells designed to store 95 percent of five consecutive year's runoff based on probable maximum precipitation. The emergency flows and mine discharge pond flows will be into an unnamed tributary of Quitchupah Creek. There are no public water supply intakes within five miles downstream of the proposed project. EPA does not expect any significant degradation of surface water quality to occur provided there is never a break in the impoundment.

- b. Sediment and erosion from disturbed areas and topsoil stockpiles will be controlled by erosion control measures and sediment ponds. Aquatic plants and animals downstream from the project site should not be significantly impacted by sediments resulting from the proposed project.
- c. The applicant has the only private groundwater well within one-half mile of the project site. Two private wells are within a mile. No public groundwater wells are within a mile of the permit area. The slurry cells will be lined to control leaching. Wells to monitor leaching will be utilized, in accordance with guidelines issued by the Utah Division of Oil, Gas and Mining.
- d. Approximately 207 acres of land surface will be disturbed during construction and operation of the proposed project. As a result, local terrestrial wildlife and vegetation will be impacted by the loss of shrub and grassland habitats.
- e. Construction of this project will result in some modifications to the natural topography.
- f. Air pollutants in the form of particulate emissions (dust) will result from the operation of the coal preparation plant and transportation of coal (haul roads and coal transfer points). This impact will be minimized in the permit area by the use of suppression controls meeting the requirements of the Air Conservation Regulations of the Utah Department of Health (DEH). Emissions from the preparation plant, stoker loadout, and new heating furnace will also be controlled according to DEH requirements.
- g. There would be a reduction in flow of Quitchupah Creek as a result of using mine discharge water for plant operations. Currently the mine water is treated in a sedimentation pond which flows into an unnamed tributary of Quitchupah Creek. This discharge currently contributes about five percent of the creek flows (which can be more in very dry months). The pond discharge would be reduced up to seventy percent for use in the preparation plant. This increased consumptive use of mine water would reduce the salt additions to Quitchupah Creek from the current 6.5 tons/day to about 2 tons/day. This would amount to a salinity reduction equivalent of 0.09 mg/l at Imperial Dam.
- h. The proposed project will improve local and regional economics due to increased employment opportunities. Approximately 20-25 jobs will be created and filled from the regional labor force. Development of the project may exacerbate the existing local problems relating to public facilities and services, and housing shortages.

- i. Truck noise will increase as a result of increased numbers of trucks transporting coal. Closest residences to the preparation plant are over a mile away, thus noise impacts from the preparation plant itself should be negligible.
- j. Cultural resource surveys have been conducted for the project area. The project will not disrupt any known cultural resource sites.
- k. An existing road from the County road to the refuse disposal area will be upgraded, including the crossing for Quitchupah Creek. The crossing will consist of using fill material over three-10 ft. diameter culverts.

6. Relationship Between Local Short-Term Uses of the Environment and Maintenance and Enhancement of Long-Term Beneficial Uses:

Coal mining, and it's related activities, is the major industry providing employment for the local population. Thus, the local short-term use of the environment for the proposed project is compatible with land uses throughout the area. Local economic conditions are likely to improve as a result of the project. Environmental quality can be maintained for the long-term provided the applicant fully meets the requirements of NPDES and other regulatory requirements.

7. Adverse Environmental Effects Which Cannot be Avoided:

- a. Approximately 207 acres of land surface will be disturbed by construction and operation of the preparation plant and ancillary facilities. This will also result in the loss of vegetation and wildlife habitats.
- b. Local topography will be altered by various components of the project, including: disposal of coarse refuse in a pile; building the slurry ponds and roads; and by grading for the plant site itself. Regrading during reclamation will be done to closely approximate pre-disturbance topography. The pre-disturbance drainage system will be restored.

8. Steps Taken to Minimize Harm to the Environment:

- a. Diversion ditches, a sediment pond, and slurry cells will be constructed on the project site to prevent suspended solids from entering Quitchupah Creek by way of surface runoff. All hydrologic control structures will be built, maintained, and monitored according to standards established by the Utah Division of Oil, Gas and Mining.

- b. The applicant's groundwater well will be monitored for quantity and quality changes in the groundwater system. The slurry cells will be lined with two feet of compacted shale to control seepage. Six wells will be installed to monitor alluvial groundwater, proximate to the slurry cells.
- c. Fugitive dust emissions will be minimized by watering or using other dust suppression techniques as needed on permit area roads, transfer points, and stockpile areas. Controls will meet the Utah Department of Health permit requirements.
- d. Coal refuse disposal is regulated by the Utah Division of Oil, Gas and Mining and the U.S. Mining Safety and Health Administration (MSHA). Compaction, neutralization, stabilization, and revegetation of refuse will be required so as not to disturb the environment with spontaneous combustion of refuse, to prevent leaching of toxic or acidic materials into surface or groundwater, and to control erosion and sedimentation. Drainage from the refuse pile will flow into the slurry cells.
- e. Reclamation of the topsoil stockpiles and some of the other areas will be undertaken soon after construction to reduce soil erosion, promote soil stability, and to protect surface water quality. Reclamation of the remaining disturbed area will take place following cessation of plant operations.
- f. Noise impacts will be minimized by enclosing the preparation plant. Impacts from coal transport truck traffic will be minimized by installing mufflers on all trucks hauling clean coal from the plant. A proposed railroad line to the project site would alleviate truck noise and impacts on local roads.
- g. EPA believes that the State and local governments, in cooperation with the applicant, can adequately plan for and manage the impacts that may result in relation to public facilities and services, and housing.
- h. If any unknown cultural resources are encountered during the course of the preparation plant construction activities, the applicant will halt all work in the vicinity of the resource and contact the Division of Oil, Gas and Mining to determine what mitigative measures should be taken.
- i. The design for the Quitchupah Creek road crossing has been approved by the Utah Division of Oil, Gas and Mining. The U.S. Corps of Engineers (COE) has determined that the crossing is authorized under the Nationwide General permit for the placement of dredged or fill material above the headwaters in non-tidal rivers and streams. COE has established conditions for this placement of fill material that will be followed.

9. Irreversible and Irretrievable Commitment of Resources:

- a. The construction and operation of the proposed project will require an irretrievable commitment of labor, construction materials, and capital.
- b. Energy in the form of fuel and electricity will be irretrievably committed to the construction of the facility.
- c. Existing land surface will be irretrievably lost for the coarse refuse disposal pile.

10. Public Objection to the Project if any and their Resolution:

Some concern has been expressed by local officials regarding potential impacts that the project may have on public facilities and services, and housing in the area. Local officials and the applicant are currently working to resolve these issues.

No other known objections have been made to this project.

11. Agencies Consulted about the Project:

- Utah Division of Oil, Gas and Mining.
- U.S. Fish and Wildlife Service.
- U.S. Office of Surface Mining.
- Emery County.

12. Reasons for Concluding There Will Be No Significant Impacts:

- a. There are no known Federally listed endangered species, historical and archaeological sites, recreational land including wild and scenic rivers, wetlands or environmentally significant agricultural lands that would be affected by the proposed project.
- b. Potential adverse environmental effects of this facility will be mitigated by the environmental protection requirements of the State and Federal agencies from which permits must be obtained.
- c. Surface and groundwater quality in the vicinity of the proposed facility will be protected by the regulations of the State of Utah and the U.S. Environmental Protection Agency. Included in these regulations are specifications for water discharges, water withdrawal, wastewater treatment, dam construction, water impoundment construction, and ground and surface water quality monitoring.

- d. Air pollution caused by preparation plant and transportation facilities is regulated by the Utah Department of Health. Adequate controls must be installed to reduce fugitive dust emissions in the permit area, the most common air problem associated with coal preparation and transport.
- e. Coal refuse disposal is regulated by the Utah Division of Oil, Gas and Mining and U.S. Mining Safety and Health Administration (MSHA).
- f. The increase in noise levels due to coal transport trucks will be minimized by the installation of mufflers on all trucks where possible.