

state of utah

FILED ACT 1015/009
~~Copy to Mary Ann~~
~~and Lee~~



DIVISION OF WILDLIFE RESOURCES

EQUAL OPPORTUNITY EMPLOYER

1596 West North Temple/Salt Lake City, Utah 84116/801-533-9333 Jim

DOUGLAS F. DAY
Director

June 9, 1981

Mr. Cleon B. Feight, Director
Division of Oil, Gas and Mining
1588 West North Temple
Salt Lake City, Utah 84116

Attention: James Smith

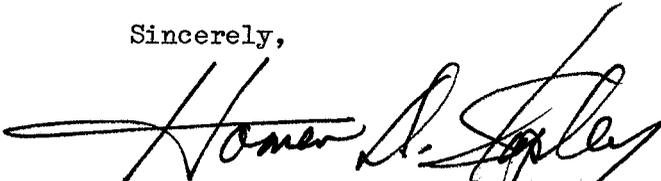
Dear Jack:

The Division has reviewed the Mining and Reclamation Plan (MRP) for the Trail Mountain Mine as proposed by the Trail Mountain Coal Company. To our knowledge the Division of Oil, Gas and Mining has not yet provided the company with formal guidelines relative to fish, wildlife and habitat information. Thus, our comments are provided without benefit of those guidelines. The MRP does not contain any wildlife resource information, habitat information or a wildlife mitigation plan.

The MRP proposed a schedule for development of resource information and a mitigation plan (note page 10-3 of the MRP). To date, three months of a six month proposed schedule have elapsed and the company has yet to contact our Division. The Division can provide to the applicant as a service of state government most of the wildlife resource information they need along with recommendations for a mitigation plan.

Thank you for an opportunity to review this plan.

Sincerely,


Douglas F. Day
Director

Acting Director

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JUN 10 1981

DIVISION OF
OIL, GAS & MINING

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Mr. Cleon B. Feight, Director
Division of Oil, Gas and Mining
1588 West North Temple
Salt Lake City, Utah 84116

DIVISION OF
OIL, GAS & MINING

Attention: Mary Ann Wright

Dear Jack:

Although the Division has not been requested to provide a consultation concerning the nature and level of detail for fish and wildlife resource information to be provided for the Trail Mountain Coal Mine Project by Natomas Trail Mountain Coal Company, the following recommendations are offered. We feel this input is needed since the company is now preparing a mining and reclamation plan. These recommendations parallel the "Guidelines for Fish and Wildlife Information Required in Utah on Coal Mine Lands" suggested by our Division and provided earlier to Mary Ann Wright.

Mapping and Associated Narrative

1. The applicant should provide detailed topographic maps or aerial photographs of the mine plan and designated adjacent areas that display wildlife habitats or land cover. Unique habitats (such as wetlands, bogs, seeps and riparian zones; floodplains; and cliffs with their associated tallus) are of special importance to wildlife; they should be displayed on maps. The maps should be accompanied by sufficient descriptive narration describing the various wildlife habitats or land cover as follows:
 - a. Total acreage for each habitat type.
 - b. Floral composition of each wildlife habitat.
 - c. Condition, successional stage and trend of all habitats.
 - d. Present use by livestock.

It is probable that this information would have to be secured through a land management agency or a qualified, private consultant.

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2. The applicant should provide detailed maps of the mine plan and designated adjacent areas that display distributions and use areas for high interest species of terrestrial and aquatic vertebrate wildlife. The map display should also show the relationship of the project area to regional wildlife distributions. The mine plan area maps should be accompanied by sufficient descriptive narration describing the high interest aquatic, amphibian, reptilian, avian and mammalian forms of wildlife and the quality (ranking) and quantity (extent or acreage) of their use areas.

This information can be assimilated by the company from a map overlay-display system available from our regional office in Price, Utah.

3. The applicant should provide detailed topographic maps of the mine plan and designated adjacent areas that display locations of all seeps, springs, wells, perennial, intermittent and ephemeral streams, lakes, reservoirs and ponds. Such maps should be accompanied by sufficient descriptive narration and tabular data concerning quantity and quality of the various surface waters (e.g., miles of stream as classified by the state water plan to include stream velocity, gradient-width, depth, pool-riffle ratio, substrata type, acres of flat water and surface water information required for SMC, Part 779.16). Water sources and unique habitats are critical to the survival of many forms of wildlife.

It is probable that this information would have to be secured through a land management agency, State Department of Health (Bureau of Water Quality) or a qualified, private consultant.

Fish or Wildlife Studies

A. Aquatic Wildlife

1. Macrophytes. Studies are not recommended.
2. Macroinvertebrates. Studies may be needed for purposes of determining stream buffer zones (UMC 817.57) in stream sections supporting biological communities.

Studies of macroinvertebrates in Cottonwood Creek are needed, since impacts have resulted from accumulations of sediments in the form of coal and other materials into this creek. Additionally other sediments have resulted from encroachment of the road upon the creek. These accumulations of sediments will likely continue until coal particles cease to enter the creek and the encroachment problems are alleviated. The area to be studied should extend from the property's uppermost access point downstream for at least two kilometers. Additionally, an appropriate upstream control area should be studied.

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Sampling of macroinvertebrate populations should be conducted each year in early spring before runoff and again in late fall. Supportive data relative to historic coal sediments through core samples of the stream's substrata should also be collected along with recording of basic water chemistry measurements. Water chemistry measurements should consider temperature, pH, conductivity, alkalinity (total and bicarbonate), sulfate, chloride, sodium, potassium, magnesium, calcium, nitrogen (nitrate), orthophosphate, turbidity, hardness, oil and grease, total dissolved solids, bacteria (total and fecal) and heavy metals (copper, lead, zinc and cadmium). Such studies should continue over a period of years until it is demonstrated that the impacts from sediments to the macroinvertebrates population in the impacted areas as compared to the control have been corrected. If, during a reasonable period of time, the impacts cannot be corrected, then mining activity should be suspended.

Studies relative to macrophytes (if desired) or macroinvertebrates (if needed) must be conducted by a qualified, private consultant.

The applicant must identify in the application what impact avoidance procedures will be utilized to keep any form of coal sediments or other pollution from entering Cottonwood Creek, which is a tributary water to Straight Canyon Creek. Snow removal is a significant contributor of sediments to local riverine systems. Deposition of coal particles in the aquatic system could have a variety of negative impacts on invertebrates and downstream fish populations. The applicant must also demonstrate facility designs that will preclude impacts on this stream.

3. Fish. All fish in the state of Utah are protected; therefore, data from low levels of study for fishes inhabiting the mine plan and adjacent areas (Straight Canyon Creek--stream section 2) are recommended to be included in the application for this mine project. Low level studies should identify potential occurrence, relative abundance, status, population trend and preferred habitat use areas for all fishes inhabiting the mine plan and adjacent areas.

If project operations are planned or develop that would alter, destroy or discharge polluting effluents into any perennial waters, appropriate state and federal permits, a mitigation plan and results from high level studies of the fish population in Straight Canyon Creek would be required of the company. Achievement of mitigation would demand detailed studies of stream velocity correlated to flow, representatives of the stream channel profile, gradient, pool-riffle ratio, substrata types identifying percent representation of each type and surface water information required for SMC 779.16.

If modification of flows is anticipated, instream flow requirements must be considered to meet the needs of the existing fisheries "biological community" and maintenance of existing riparian or wetland zones. Such baseline information would allow for development of mitigation or reclamation plans that would allow for avoidance, lessening or mitigation of impacts to the fishery and maintenance or reestablishment of unique habitat types.

Low levels of study concerning fishes have already been completed and are available from the Utah Division of Wildlife Resources office in Price. High level studies have not been conducted and would necessitate the applicant contracting the Utah Division of Wildlife Resources to conduct a fish population inventory. Other elements of such a high level study would have to be secured through the services of a qualified private consultant.

B. Terrestrial Wildlife

1. Wildlife habitat types. Within southeastern Utah, there are twelve basic wildlife habitat types (riparian and wetland, desert scrub, pasture and fields, urban or parks, cliffs and tallus, sagebrush, aspen forest, ponderosa forest, parkland and spruce-fir forest). These wildlife habitats are appropriately located within the cold desert (upper Sonoran life zone), submontane (Transition life zone) and montane (Canadian, Hudsonian and Alpine life zones) ecological associations. The applicant should identify these environs as they relate to the mine plan and adjacent areas.

Wetland and riparian habitats are ranked as being of critical value to all wildlife. Such zones are normally associated with drainage bottoms (ephemeral or intermittent), or perennial streams (SMC 700.5 and UMC 700.5), seeps and springs within the upper Sonoran, Transition and Canadian life zones. Cliffs and their associated tallus areas that lie within the upper Sonoran and Transition life zones are ranked as being of high-priority value to all wildlife. When compared to all other wildlife habitats, the aforementioned situations are considered to represent unique habitat associations.

Riparian and wetland areas are highly productive in terms of herbage produced and use by wildlife as compared to surrounding areas. Experience has shown that as much as 70 percent of a local wildlife population are dependent upon riparian zones. Cliffs and tallus are of special importance to many high interest wildlife. These unique habitat types must be identified in the permit application and protected due to their high value for all wildlife.

Quantitative (acreage) and qualitative (condition, successional stage and trend) data concerning the wildlife habitats in each ecological association should be included as part of the mine permit application.

2. Amphibians. All amphibians in the state of Utah are protected; therefore, data from low levels of study for amphibians inhabiting the mine plan and adjacent areas are recommended to be included with the application for this mine project. Currently, the tiger salamander is the only species of amphibian (that inhabits the project area) recognized as being of high interest to the state of Utah. It is not believed that the project will significantly impact this species or its high value habitat use areas; thus, high level studies need not be considered.
3. Reptiles. All reptiles in the state of Utah are protected; therefore, data from low levels of study for reptiles inhabiting the mine plan and adjacent areas are recommended to be included with the application for this mine project. Currently, the Utah milk snake and Utah mountain kingsnake are the only species of reptiles (that inhabit the project area) recognized as being of high interest to the state of Utah. It is not believed that the project will significantly impact these species or their high value habitat use areas; thus, high level studies need not be considered.

Low level studies should identify potential occurrence, relative abundance, status, population trend and preferred habitat use areas for all amphibians and reptiles inhabiting the mine plan and designated adjacent areas. Such studies concerning amphibians and reptiles have already been completed and are available from our regional office in Price.

4. Birds. All birds in the state of Utah are protected; therefore, data from the low levels of study for avifauna inhabiting the mine plan and adjacent areas are recommended to be included with the application for this mine project. Low level studies should identify potential occurrence, season of use, relative abundance, status population trend and preferred habitat use areas for all birds inhabiting the mine plan and designated adjacent areas. These studies have already been completed and are available from our office in Price.

An intensive survey to be provided by the applicant for breeding raptors and "high priority" habitats--43 CFR 3461.1 (n-1)--for other birds that have high federal interest is recommended. Raptors are extremely sensitive to man's disturbances. There exists a lack of significant site-specific knowledge of aeries and other "high priority" habitats for avifauna on the mine project area. Such a survey would represent a high level of study and only needs to be conducted within a one kilometer radius of planned surface developments and activity centers. The result of such study should be included with the application for a mining permit.

If such surveys have already been completed, the Division requests an opportunity to review this work in order to make a determination of its adequacy.

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High level studies relative to use of the mine plan and designated adjacent areas by migratory and upland game birds, federally listed endangered species of avifauna and potential use by migratory birds having high federal interest in the Uintah-Southwestern Utah coal leasing region should be included with the application for a mining permit. Such studies are ongoing or have been completed and are available from our regional office in Price.

No other high level studies are recommended for avifauna since unique habitats have not been identified as having potential to be impacted by the mine project. If the applicant's plans change, high levels of study would be recommended concerning high interest species and their use of unique habitats. Results of such studies should be included with the permit application. This data is not generally available and would necessitate the services of a qualified, private consultant.

5. Mammals. It is recommended that data from low levels of study for mammals inhabiting the mine plan and adjacent areas be included with the application for this mine project. Low level studies should identify potential habitat use areas for all mammals inhabiting the mine plan and designated adjacent areas. These studies have already been completed and are available from our office in Price.

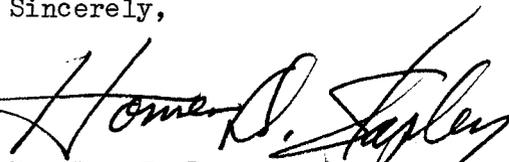
Additionally, high level studies relative to use of the mine plan and designated adjacent areas by protected species and federally listed endangered species of mammals should be included with the application for a mining permit. Such studies are ongoing or have been completed and are available from our office in Price.

No other high level studies are recommended for mammals since high interest species of limited distribution will not be severely impacted by the mining project.

6. Consultation Required for the Presence of Threatened or Endangered Species. It is recommended that the applicant and the Division of Oil, Gas and Mining contact the U. S. Fish and Wildlife Service for consultation required to determine the presence or nonpresence of threatened or endangered biotic species on the project.

Thank you for an opportunity to provide input into this area of concern.

Sincerely,


Douglas F. Day
Director

Acting Director