



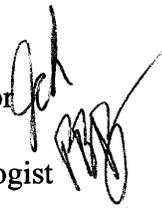
State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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May 28, 1999

TO: File

THRU: Joe Helfrich, Permit Supervisor 

FROM: Paul Baker, Reclamation Biologist 

RE: Dugout Canyon Exploration, Canyon Fuel Company, LLC, Dugout Canyon Mine, ACT/007/039-EX99B, Folder #2, Carbon County, Utah

SUMMARY:

Canyon Fuel is proposing to conduct coal exploration in Dugout Canyon and areas to the west. The entire area is critical deer summer range, and sites near potential deer fawning areas should not be disturbed until after July 15. Also, the applicant needs to clarify the revegetation plan and provide for mulching or raking the area after seeding.

TECHNICAL ANALYSIS:

ADMINISTRATIVE INFORMATION

Regulatory Reference: R645-200

Analysis:

Canyon Fuel Company is proposing to drill up to six exploratory holes and to conduct one seismic line survey within and to the west of Dugout Canyon. The Notice of Intention (NOI) includes the applicant's name, address, telephone number and representatives who will be present during drilling operations. Map 1 shows the locations of the proposed exploration activities, and Table 1 shows legal descriptions to the nearest quarter section, collar elevations, and estimated coal and total depths.

The applicant desires to begin non-disturbing activities, such as flagging, as soon as road conditions allow. Ground-disturbing activities must begin by mid-July to avoid late season used conflicts, but the applicant would like to begin in the middle of June. It is hoped that the exploration work can be completed by the end of August, but if exploration begins July 15 and lasts nine weeks, it would not be done until September 16.

Specific exploration and reclamation methods are described in each section of the NOI.

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The applicant intends to remove less than 250 tons of coal through exploratory drilling.

The coal exploration regulations do not require information about cultural resources, but other laws do. Drill sites "I," "J," and "L" were surveyed in 1998, and no cultural resources were identified. The seismic study is to be conducted along an existing road, so it is unlikely this area would contain cultural resources. A survey will be conducted at sites "G," "H," and "N" and their access routes prior to ground-disturbing activity.

Findings:

Information provided in the NOI is considered adequate to meet the requirements of this section of the regulations.

OPERATIONAL STANDARDS

Regulatory Reference: R645-202-231, R645-202-232

Analysis:

There are eight listed or candidate threatened or endangered species that do or may occur in Carbon County. The exploration areas do not contain habitat for any of these except the bald eagle and peregrine falcon.

Bald eagles are not known to nest in the area but could potentially be there in the winter. Because of the timing of the proposed operations, it is unlikely there would be any effect on bald eagles.

Peregrine falcons are believed to nest in the Book Cliffs several miles from the proposed exploration area, but they have not been found in the immediate area.

According to information in the mining and reclamation plan, there are golden eagle and buteo nests within one-half mile of proposed drill site "G" and seismic line "A." In addition, it appears the exploration areas contain habitat suitable for tree-nesting raptors, especially red-tail hawks, but possibly including accipiters, such as goshawks.

In the wildlife section, the NOI says exploration activities will commence after July 15, 1999, but it also commits to certain precautionary measures that will be implemented if approval allows drilling to begin before July 15. If exploration is to begin before July 15, the applicant will conduct a ground raptor survey within a one-half mile radius of affected drill pads and the seismic survey line and forward the results to the Division. If the survey identified nesting raptors within a one-half mile buffer zone of the exploration areas, no disturbance would occur

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within the buffer zone until after July 15. The commitments in the NOI with regard to raptors are acceptable.

According to information in the current mining and reclamation plan, the entire area contains critical deer summer range. Although the area is used throughout the summer, the most important time is during fawning which takes place primarily from May 1 through July 15. The most important areas for fawning are those that provide good cover, such as aspen, conifer, and pinyon/juniper areas.

Comparing Map 1 in the exploration NOI and Plate 3-1 in the mining and reclamation plan, it appears drill holes G, I, J, and N are in sage/grass vegetation communities, L is in a Douglas fir community, and H is in a Ponderosa pine community. The seismic line is mostly in sage/grass, but the southern end is in Ponderosa pine and sage/grass/juniper.

Neither a Division nor a Wildlife Resources biologist has visited the sites, but, based on available information, the sites most likely to contain nearby fawning areas are drill sites H, I, L, and N and a portion of the seismic line. This leaves sites G and J as being least likely to be near deer fawning areas. Although L is in a Douglas fir community, it is right next to the Dugout Canyon road, so exploration in this area should not be a concern.

Any of the sites could be disturbed after July 15, but only sites G, J, and L should be disturbed before July 15. The NOI says only sites G, J, and L would be available for disturbance prior to July 15 and that other sites would not be disturbed prior to July 15. This commitment meets regulatory requirements.

The applicant commits to conduct an on-site inspection with regulatory agencies of proposed drill sites and access routes prior to any construction or drilling to discuss site-specific concerns if requested. This on-site inspection is needed to determine whether there are any concerns not addressed in the NOI. For example, the NOI mentions a small intermittent stream and says it could be culverted or a rock bridge built if necessary. It would be best to see and discuss features like this. It would also be possible to look at the sites to determine whether they are near fawning areas.

Findings:

Information provided in the proposal is considered adequate to meet the requirements of this section of the regulations.

RECLAMATION STANDARDS

Regulatory Reference: R645-202-242

Analysis:

After exploration is complete, debris and equipment will be removed. When the mud pit is dry enough, it will be filled with subsoil and the site regraded. After this, straw bales or silt fence will be removed, topsoil will be spread, and the area will be seeded.

Shortly after the topsoil is spread, the drill pad areas will be lightly roughened and reseeded. The NOI shows a seed mix consisting of five grasses, three non-grass forbs, and one shrub. It contains three introduced species that are probably not essential for revegetation success, but since they are not overly aggressive species, the seed mix is acceptable. The species used should be capable of stabilizing the soil surface from erosion, and they are compatible with vegetation of the area.

In most cases, the surface will then be raked into the soil surface. Where warranted because of the need for erosion protection, certified noxious weed free straw or hay mulch will be applied at the rate of 2000 pounds per acre.

Preexisting roads will remain after exploration is complete, but where access roads are built or logging trails are reconstructed, they will be restored and reseeded with methods similar to those used for reclamation. Areas where the vegetation was bladed will be ripped and seeded.

These commitments satisfy the Division's requirements for the revegetation plan. It will be necessary to revisit the sites after a few years to be sure vegetation has reestablished in accordance with the performance standards.

Findings:

Information provided in the proposal is considered adequate to meet the requirements of this section of the regulations.

RECOMMENDATIONS:

The applicant has met the regulatory requirements for protection of biological resources.