

September 18, 2017

C/007/0005
Received 9/21/17
Task #5518

Mr. Daron R. Haddock
Division of Oil, Gas, and Mining
1594 West North Temple
Salt Lake City, Utah 84114-5801

RE: Notice of Intent (NOI) – Boulger Reservoir Monitoring, Canyon Fuel Company, LLC,
Skyline Mine, C/007/0005,

Dear Daron:

Attached to this letter is pertinent information for a Notice of Intent (NOI) to install five (5) piezometers and six (6) survey monuments surrounding Boulger Reservoir. The purpose of the piezometers and survey monuments are as defined in R645-100, "Coal Exploration...(b) the gathering of environmental data to establish the conditions of an area before beginning coal mining..." The drilling of the piezometers will collect geotechnical data on the integrity of the dam then monitor the water level or saturation of the dam as mining approaches the area. Similarly, the survey monuments will be monitored regularly as mining approaches to define and subsidence or deformation in the area. Skyline is hoping to attain approval and conduct the work this Fall. Ideally we would like to initiate the work by mid-October to avoid the potential for winter conditions later in the year.

As the attached NOI illustrates, the project has minimal surface disturbance with the work being conducted with a truck-mounted drill rig that will traverse overland from the Boulger Campground over a previously disturbed, but currently abandoned road. The work is anticipated to take only 1-3 days, with other support vehicles using the existing road located south of the reservoir. Both the piezometers and survey monuments, once installed, will be incorporated into the M&RP as part of the Boulger Reservoir monitoring program. The incorporation will include the specifics of the monitoring, the reclamation, the bonding for reclamation, etc.

Attached to this cover letter are completed C1 form.

If you have any questions regarding this information, please call me at (435) 448-2636.

Sincerely:



Gregg A. Galecki
Canyon Fuel Company, LLC.
Environmental Engineer – Skyline Mines

APPLICATION FOR COAL PERMIT PROCESSING

Permit Change New Permit Renewal Exploration Bond Release Transfer

Permittee: Canyon Fuel Company, LLC

Mine: Skyline Mine

Permit Number: C/007/005

Title: NOI - Boulger Piezometers and survey monuments

Description, Include reason for application and timing required to implement:

Installation of piezometers and survey monuments around Boulger reservoir

Instructions: If you answer yes to any of the first eight (gray) questions, this application may require Public Notice publication.

- Yes No 1. Change in the size of the Permit Area? Acres: ___ Disturbed Area: _____ increase decrease.
- Yes No 2. Is the application submitted as a result of a Division Order? DO# _____
- Yes No 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area?
- Yes No 4. Does the application include operations in hydrologic basins other than as currently approved?
- Yes No 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond?
- Yes No 6. Does the application require or include public notice publication?
- Yes No 7. Does the application require or include ownership, control, right-of-entry, or compliance information?
- Yes No 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
- Yes No 9. Is the application submitted as a result of a Violation? NOV # _____
- Yes No 10. Is the application submitted as a result of other laws or regulations or policies?
Explain: _____
- Yes No 11. Does the application affect the surface landowner or change the post mining land use?
- Yes No 12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2)
- Yes No 13. Does the application require or include collection and reporting of any baseline information?
- Yes No 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
- Yes No 15. Does the application require or include soil removal, storage or placement?
- Yes No 16. Does the application require or include vegetation monitoring, removal or revegetation activities?
- Yes No 17. Does the application require or include construction, modification, or removal of surface facilities?
- Yes No 18. Does the application require or include water monitoring, sediment or drainage control measures?
- Yes No 19. Does the application require or include certified designs, maps or calculation?
- Yes No 20. Does the application require or include subsidence control or monitoring?
- Yes No 21. Have reclamation costs for bonding been provided?
- Yes No 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream?
- Yes No 23. Does the application affect permits issued by other agencies or permits issued to other entities?

Information submitted electronically in Adobe Acrobat .pdf format. (This number includes a copy for the Price Field Office.)

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.

Corey Heaps
Print Name

Corey Heaps, GM, 9-21-17
Sign Name, Position, Date

Subscribed and sworn to before me this 21 day of Sept, 20 17

Melissa S Willden
Notary Public
My commission Expires: Utah 3-19, 2019
Attest: State of Utah } } ss:
County of Carbon



For Office Use Only: 	Assigned Tracking Number: 	Received by Oil, Gas & Mining
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NOTICE OF INTENT TO CONDUCT MINOR COAL EXPLORATION

**CANYON FUEL FLAT CANYON
UPPER HUNTINGTON CANYON
2017**

Canyon Fuel Company
A Subsidiary of Bowie Resource Partners, LLC.

September 2017



Canyon Fuel Company LLC
Skyline Mines

INTRODUCTION

Canyon Fuel Company – Skyline Mine (a subsidiary of Bowie Resource Partners) is submitting this Notice of Intent to Conduct Minor Coal Exploration to the Utah Division of Oil, Gas, and Mining (UDOGM) to obtain approval for the installation of five (5) piezometers and six (6) survey monuments on the Boulger Reservoir dam and surrounding area for the gathering of environmental information in advance of mining. The work is scheduled to be conducted in the Fall 2017, ideally in the month of October to avoid winter conditions later in the year. The purpose of the piezometers and survey monuments are as defined in R645-100, “Coal Exploration...(b) the gathering of environmental data to establish the conditions of an area before beginning coal mining...” The drilling of the piezometers will collect geotechnical data on the integrity of the dam then monitor the water level or saturation of the dam as mining approaches the area. Similarly, the survey monuments will be monitored regularly as mining approaches to-define-and-subsidence-or-deformation-in-the-area. This application is formatted to address the specific requirements of R645-201-200. Other related information is given in Appendix A and B. This application has been submitted electronically.

R645-201 Coal Exploration: Requirements for Exploration Approval

The proposed exploration plan qualifies as minor exploration as described in the State of Utah Coal Mining Rules R645 section R645-201-200.

R645-201-221

The name, address and telephone number of the applicant are:

Canyon Fuel Company
C/o Skyline Mine
HC 35 Box 380
Helper, Utah 84526
435-448-2693

The applicant is the same as the operator of the proposed exploration plan. Correspondence regarding this exploration plan should be addressed to:

Gregg Galecki
Canyon Fuel Company
C/O Skyline Mine
HC 35 Box 380
Helper, Utah 84526
435-448-2636

R645-201-222

The name, address and telephone number of the representative of the applicant who will be present during and be responsible for conducting the exploration is:

Gregg Galecki
Canyon Fuel Company
C/O Skyline Mine
HC 35 Box 380
Helper, Utah 84526
435-448-2636

R645-201-223

The work area is generally located in central Utah in the Manti-LaSal National Forest along State highway SR-264 approximately one mile west of the north end of Electric Lake. The Boulger Reservoir is located in the NW/SE Section 33, T13S, R6E (See **Plate 1**). The location of four (4) of the piezometers will be on the top of the dam, while the last piezometer will be located at the toe of the dam. The six (6) survey monuments will be distributed with three (3) located on the dam and the remaining three (3) located strategically around the perimeter of the reservoir.



The US Forest Service is the managing surface agency regulating the land surrounding the reservoir. The dam structure is owned and maintained by the US Forest Service while the UDS monitors the safety and integrity of the dam. Both agencies will be notified of the proposed activity.

Boulger Dam is listed as a low Hazard structure, constructed in 1937 with a structural height of 17 feet and a storage capacity of 30 acre feet. A survey of the reservoir conducted in 2017 indicated the reservoir currently contains approximate 19.90 acre feet of storage.

R645-201-224

The timing of the project is very short term. Contract personnel will provide technical assistance and oversight of the project. Skyline is hoping to attain approval and conduct the work this Fall. Ideally we would like to initiate the work by mid-October to avoid the potential for winter conditions later in the year.

R645-201-225

The method of work is low impact with the project to be completed in approximately 1-2 days. A total of five (5) piezometers and six (6) survey monuments will be installed during the project (See **Plate 2**). The drilling of the piezometers will collect geotechnical data on the integrity of the dam then monitor the water level or saturation of the dam as mining approaches the area. Similarly, the survey monuments will be monitored regularly as mining approaches to define and subsidence or deformation in the area.

Figure 1 illustrates the construction details of both the piezometer and survey monument construction details. A truck-mounted drill rig will access the dam using a truck-mounted drill rig that will traverse overland from the Boulger Campground over a previously disturbed, but currently abandoned road. The truck-mounted drill rig will be used to drill four (4) holes across the top of the dam to determine the geotechnical integrity of the dam and develop the four (4) holes into piezometers. The final piezometer will be developed at the toe of the dam using a low-impact tractor-mounted direct-push rig since geotechnical information is not necessary at this location and to reduce impact. The six survey monuments will be installed using the same low-impact rig. (See **Figure 2** for of the tractor-mounted direct-push rig)

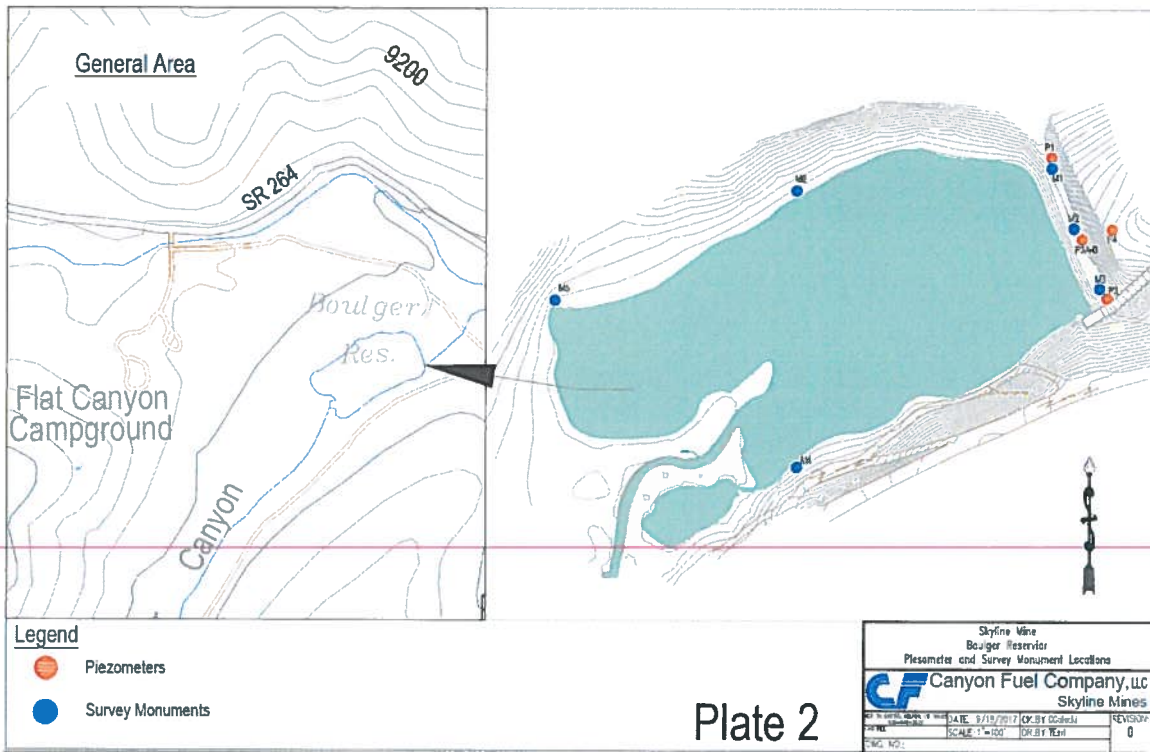




Figure 2

Threatened, endangered, or special interest species in the exploration area include the northern goshawk, western boreal toad, and the three-toed woodpecker. Exploration and reclamation activities will not occur within one half mile of known breeding and nesting areas in addition to the breeding and nesting season being over for 2017. Appendix A (confidential file) contains Wildlife Resources report for the project area conducted by Mace Crane of Alpine Ecological. Additional biological surveys were completed in the area in 2014 through 2017 and are on file.

EPG, LLC, is in the process of conducting a cultural resource survey of the proposed work areas which will be attached as Appendix B (Confidential File).

Once installed and operational, both the piezometers and survey monuments will be incorporated into the Utah Division of Oil, Gas, and Mining (DOG M) Mining and Reclamation Plan (M&RP). At time of reclamation, the equipment will be removed, backfilled, and reseeded using the appropriate seed mix.

The method of revegetation is intended to encourage prompt revegetation and recovery of a diverse, effective, and permanent vegetative cover. The following seed mix was prescribed by the U.S. Forest Service for the reclamation of 2015 Upper Huntington Canyon area drill holes and will be also used for this project unless otherwise modified by the regulatory agencies at the time of seeding (the seed mix as approved by UDOG M will be utilized):

Seed Mix		<u>Pounds PLS/acre</u>
Western Wheatgrass	Elymus smithii	2
Basin Wild Ryegrass	Elymus cinereus	1
Intermediate Wheatgrass	Elymus hispidus	2
Yellow Sweet Clover	Melilotus officinalis	1
Blue Leaf Aster	Aster glaucodes	0.25
Silvery Lupine	Lupinus argenteus	1
True Mahogany	Cercocarpus montanus	1
Lewis Flax	Linum lewisii	0.5
Small Burnet	Sanguisorbia minor	1
	TOTAL	9.75

The pure live seed (PLS) rating will be 99% containing a maximum of 1% weeds, none of which are toxic and only seed meeting the State Seed Act will be used. Certification tags will be retained by the permittee. The vegetative cover resulting from this seed mix is considered capable of stabilizing the soil surface from erosion.

R645-202.230

No adverse impacts to stream channels will occur during the installation of the proposed project. The truck-mounted drill rig will use an existing trail away from existing stream channels and be only on the dam. The lightweight tractor-mounted rig will be used for all other locations. The travel path will avoid mesic habitats between drill sites.

Approach drill sites from the upland areas. The selected travel path will minimize the distance necessary in damp or wet soils. The use of drill mats or a suitable alternative will be used to reduce impact to wet soil areas.

R645-202-231

EPG, LLC, is in the process of conducting a cultural resource survey of the proposed work areas which will be attached as Appendix B (Confidential File).

R645-202-232

Temporary drilling access road construction is not planned for this project as previously described. Regulations cited in R645-202-232 relative to roads will be followed as they apply.

R645-202-233

No plan is being implemented to remove topsoil. As stated in R645-301-232.400, minimal disturbances as described are below the threshold for removal.

R645-203.234

No diversions of overland flows will take place during the proposed activity.

R645-202-235 (R645-301-624.210, R645-301-731.121, R645-301-731.215))

The project is being conducted in a manner to minimize disturbance to the prevailing hydrologic balance by: 1) minimizing surface disturbance with a minimal footprint; 2) using a tractor-mounted rig where possible; 3) incorporating drill mats or similar weight disbursement techniques to minimize trails; and 4) locating the equipment on the center of the dam to minimize soil erosion.

APPENDIX A
(CONFIDENTIAL FILES)
WILDLIFE SURVEY

**APPENDIX B
(CONFIDENTIAL FILES)**

CULTURAL RESOURCE INVENTORY

EPG

To: Gregg Galecki
Environmental Engineer
Bowie Resources Partners LLC
HC 35 Box 380

From: Alpine Ecological
HC80 Box 570
Greenwich, UT 84732

Date: 9/18/2017

Re: **Special Status Wildlife Species, Regulatory Compliance and Records
Review for the Burnout Canyon Heli-portable Drill Site Project and the
Boulger Reservoir Piezometer Installation Project**

Introduction

Skyline Mine proposes to install up to five piezometer, six brass monuments and a seismic monitoring station around Boulger Reservoir in the Fall of 2017; to monitor both the water levels in the reservoir and the integrity of the dam. In areas around the reservoir, the monuments will be installed using a small light duty tractor with a drilling unit attached on the back. This will reduce potential disturbance to the soils and vegetation surrounding the reservoir. The remaining piezometers will be installed using a conventional drilling rig. The seismic monitoring station will be installed using foot traffic and a portable trencher to install conduit to the site. The project is estimated to be completed within three days.

Skyline Mine also proposes to install two water monitoring wells within 50 of each other, at one well site located between Highway 264 and west of Huntington Creek; across from the opening of Burnout Canyon. Drilling will be done using a heli-portable drill rig to minimize any surface disturbance to the soil and surrounding vegetation. This project is estimated to be completed within two weeks.

Records and Literature review was completed by Alpine wildlife biologists who utilized GIS data from the Utah Division of Wildlife Resources' (UDWR) Utah Threatened, Endangered, and Sensitive Species Occurrences shapefiles and mapping services. The US Fish and Wildlife Services' Information, Planning and Consultation System (IPaC). Research also included species occurrences, historic records, species ecology, life histories, known distributions, and habitat requirements. Previous survey wildlife surveys have been conducted on and around both project areas during 2015, 2016, and 2017.

Results and Recommendations

The only special status species of concern of both projects is western (boreal) toad *Bufo boreas*. Other special status species such as northern goshawk (*Accipter gentilis*) and American three-toed woodpecker (*Picoides dorsalis*) were not considered further because

the project areas do not occur within suitable habitat or the project will be implemented outside of established sensitive time periods (i.e., raptor or migratory bird nesting seasons).

According to the UNHP 2003 progress report there are records of occurrence of western toad in the area of Skyline Mine prior to 1983. The mapping scale within the report makes it difficult to determine exact locations. The Utah Conservation Database Center (UCDC) cites the last observations within the Scofield and Fairview Lakes map quadrants of documented records as 6/18/1950. Holland (2002) summarized some of the ecological requirements for this species in the southern Rocky Mountains which is applicable to the survey area as follows:

“Ideal boreal toad breeding sites presumably contain still water, very shallow margins, and persistent water levels. Egg masses are typically deposited in the shallowest available areas of the breeding site. . . . For a wetland to be considered suitable it should contain at least 1 gradually sloping bank with water \leq 10-cm deep during the breeding season. Potential sites should also be examined in August to ensure that breeding site persistence is sufficient to allow completion of the larval period. In addition, a deeper area of water may be necessary to provide tadpoles with a night refuge of warmer water An old, but active, American beaver pond complex seems an ideal model for a breeding locality because shallow, eutrophicated ponds exist in concert with water level maintenance by beaver.” Holland (2002) found that both increased variation in daily water temperature and increased variation in water levels during summer had negative effects on tadpole development in this species. Terrestrial habitats of this species, even within Utah, are varied and include sagebrush steppe, piñon–juniper woodland, and mixed and coniferous forests of various species compositions. Adult males typically remain within a few hundred meters of breeding sites throughout the year, while adult females usually do not, often moving several kilometers from breeding sites after breeding in spring or early summer.

A survey for western toad was conducted in 2014 by Alpine biologist Allan Stevens, PhD around Boulger Reservoir. The survey results did not report any findings of boreal toads. Inventories were conducted in June, July, and August of 2014. Inventories were conducted by walking meandering transects in the riparian areas, which extended out to 20 feet on either side of the stream centerline. After the completion of the initial walking transects an additional night time spotlight survey was also conducted along the upper sections of the streams in Boulger Canyon. These areas contain the highest number of ecological attributes within the indicator parameters, as defined by Oliver and Tuhy (2010), necessary for western toad occupancy.

Although no boreal toads were observed in the area of Boulger Creek, both project areas have ecological attributes required by boreal toad. Therefore, we make the following recommendations to minimize impacts to those attributes:

1. Do not travel through mesic habitats between drill sites. Approach drill sites from the xeric, upland areas. Only travel the minimum distance necessary in damp or wet soils.
 2. Use drill mats, or a suitable alternative to reduce the pounds per square inch rating on equipment at the drill site location; and access route if necessary.
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