

EXPLORATION TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

June 20, 2005

TO: Internal File

FROM: Stephen J. Demczak, Environmental Scientist III/Engineering, Team Lead

RE: Letter Of Intent to Conduct Minor Exploration, PacifiCorp, Deer Creek Mine, C/015/018, Task ID #2177, Outgoing File

SUMMARY:

PacifiCorp originally submitted an exploration plan in March 2005 to drill a total of six exploration holes within the Mill Fork Coal Lease ML-48258 in 2005. However, development mining in the Mill Fork Lease intercepted a complex series of rock splits that required revision of the exploration plan to assist in the interpretation of the geology. PacifiCorp now proposes to reduce the total number of exploration holes from six to four. The plan is formatted to follow the applicable portions of Coal Exploration Rules R645-200 through R645-203.

The helicopter supported drilling is planned for July 15 to August 15 2005. The Permittee anticipates completing all drilling and reclamation activities associated with this project within 60 days following the date of implementation.

EXPLORATION TECHNICAL ANALYSIS:

COAL EXPLORATION

Regulatory Reference: R645-200.

SCOPE AND RESPONSIBILITIES

Regulatory Reference: 30 CFR 772.1; 30 CFR 772.10; 30 CFR 772.11; R645-100-400; R645-200-100; R645-200-200; R645-201-100.

Analysis:

PacifiCorp has proposed to conduct minor exploration by drilling four holes (2005- 1 thru 4) within the Mill Fork Coal Lease ML-48258 in the year 2005.

EXPLORATION TECHNICAL MEMO

The permittee has committed to comply with the requirements of R645-200 through R645-203.

This minor coal exploration will be conducted on Utah State Coal Lease ML-48258 and the United States Forest Service administrates the surface land; therefore, 43 CFR Part 3480-3487 does not apply.

Findings:

The information given is to address the requirement of State program and R645-200 through R645-203. The information that was submitted is complete but not necessarily adequate until a review of each regulation is made within this document.

REQUIREMENTS FOR NOTICE OF INTENTION TO CONDUCT MINOR COAL EXPLORATION

Regulatory Reference: 30 CFR 772.10; 30 CFR 772.11; R645-100-412; R645-201-200.

Analysis:

R645-201-221, the coal rule requires the applicant to give name, address, and telephone number of the applicant's representatives, who will be present at and responsible for conducting the exploration operations. This information has been submitted in the Notice of Intent on Page 2.

R645-100-400, R645-200-100, R645-200-200, and R645-201-100; Energy West Mining has given a Notice of Intention to Conduct Minor Coal Exploration with a narrative and map describing the exploration area and indicating where the exploration will occur.

The permittee will transport drilling equipment, materials, and personnel by helicopter from the staging area. The drill sites will be relatively level (20 percent slope or less). There will be no removal of vegetation such as grasses and trees, but dead-fall and some taller shrubs (mahogany) or aspen trees will be removed for safety reasons.

The drill site will not be greater than 40 feet by 40 feet area. Brattice or other similar material will be placed on the ground beneath the drill rig. Minor digging, using hand tools may be necessary to level the drill rig using wood block or other materials.

A maximum of twenty pounds of coal will be removed per drill hole with a total of about 160 pounds from all the drill holes. This will be achieved by drilling a three-inch diameter hole.

Upon completion, the drill hole will be sealed with cement from the bottom of the hole to ground level.

The exploration is projected to start July 15, 2005 and end by August 15, 2005.

Findings:

The applicant has given all of the necessary information as requirements of R645-201-221 such as name, address, and telephone number.

The permittee has submitted the necessary information to comply with regulations R645-100-400, R645-200-100, R645-200-200, and R645-201-100 in the analysis.

COMPLIANCE DUTIES

Regulatory Reference: 30 CFR 772.13; R645-202.

OPERATIONAL STANDARDS

Regulatory Reference: 30 CFR 772.13; R645-202-100.

Analysis:

R645-202-200; Energy West Mining will not substantially disturb the land surface and will remove less than 250 tons of coal.

PacifiCorp has committed to comply with all coal exploration requirements of the State Program, and any conditions on approval of the exploration plan.

Roads

PacifiCorp will use only existing roads for this project; no new roads will be constructed. The applicant of the Notice of Intent will be using US Forest Service roads for staging areas of heavy equipment. The US Forest Service will be notified 48 hours in advance of heavy equipment traveling on the road.

The applicant will be using U.S. Forest Development Roads #245, #017, and #040. Prior to drilling, Energy West will obtain a permit for the use of these roads.

EXPLORATION TECHNICAL MEMO

This information is addressed on Page 8 in the Letter of Intent.

Topsoil

The method of drilling used by PacifiCorp will disturb a small amount of topsoil. The leveling of the drill rig and associated equipment may require a small amount of excavation. Brattice cloth is to be used to cover the ground to protect the topsoil and surface vegetation. I have inspected prior drill sites, using this method vegetation quickly recover. I could not find any considerable impact to the area. The disturbed area will be reseeded with the approved seed mix in the Letter of Intent.

Findings:

The permittee has met the minimum requirements for minor exploration.

RECLAMATION STANDARDS

Regulatory Reference: 30 CFR 772.13; R645-202-200.

Analysis:

Approximate original contour

The drill site areas will be basically flat with no major excavation occurring. Minor shoveling may be needed for leveling the drill rig. The area will be at approximate original contour.

This information is on Page 13 in the Letter of Intent.

Boreholes

Groundwater is not anticipated. However, if ground water is present it will be reported to (SITLA, USFS, and DOGM) and a determination will be made regarding the modification of the drill hole to a monitoring well.

Upon completion, each drill hole will be completely sealed with cement/bentonite from the bottom of the hole to ground level. Enough cement will be mixed and pumped into the hole to completely seal the coal horizon. The remainder of the hole will be filled completely with bentonite slurry to within five feet of the surface. A cement surface plug will fill the top five

feet. A brass monument marker will be placed in the top of the cement surface plug with the hole number and year.

Facilities and Equipment

All drilling equipment and materials will be removed from the drill area once drilling is completed. Sealing will start thereafter and all equipment and material for sealing drill holes will be removed when sealing is completed.

This information is in Letter of Intent.

Findings:

The permittee has met the minimum requirements for minor exploration.

PUBLIC AVAILABILITY OF INFORMATION

Regulatory Reference: 30 CFR 772.15;R645-203.

Analysis:

The Division will have a copy of the Notice of Intent to Conduct Minor Coal Exploration at the Division of Oil, Gas and Mining office.

Findings:

The Division will have a copy of the Notice of Intent to Conduct Minor Coal Exploration at the Division of Oil, Gas and Mining office.

RECOMMENDATIONS:

The permittee has met the minimum requirements for the Letter Of Intent. Therefore, it is recommended for approval.