



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

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TO: **Internal File**

FROM: Peter H. Hess, Sr. Reclamation Specialist *Sm for Peter*

RE: Notice of Intent to Conduct a Minor Coal Exploration, Lodestar Energy, Inc., White Oak Mines, C/007/001-EX00D

SUMMARY:

Lodestar Energy, Inc., White Oak Mines has submitted a minor coal exploration application to the UDNR/OGM which has been prepared by MENCON, LLC, of Price, Utah. This application is to permit the exploratory drilling of four boreholes north of the old Utah #2 Mine, which is located adjacent to the White Oak rail loading facility. The applicant is interested in determining the physical and chemical characteristics of the coal in the lower O'Connor seam.

Boreholes which have been previously drilled in the area only penetrated the upper O'Connor seam. Upon completion of the exploration activities, one or more of the boreholes may be retained as a ground water monitoring well. Mining occurred in the upper O'Connor seam under the direction of previous permittees, approximately fifteen years ago.

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:

The four holes relative to this minor coal exploration will be drilled on private land whose surface ownership is held through lease by the applicant, Lodestar Energy, Inc., White Oak Mine.

Boreholes

Page 21 of 22 of EX00D (under 202-245) commits the applicant to cementing all of the exploration holes **which will not be used for water monitoring purposes** from bottom to collar (for their entire depth) by the licensed driller. The machinery associated with the exploration will then be removed from the pad so that the remaining reclamation requirements (which have been previously addressed) can be initiated.

Facilities and Equipment

All equipment associated with the exploration activities will be removed from the site(s) as soon as compilation of the geologic data is completed. Reclamation activities (as they have been previously addressed within this submittal) can then commence. As the boreholes which will not be used for water monitoring purposes will be cemented for their entire depth, it will not be feasible to obtain additional environmental data from them. The reduction of impacts due to exploration will not be necessary. If it is determined that the plugged boreholes are necessary to facilitate future mining and reclamation activities, the permittee will need to remove the cement plug from the boreholes.

Findings:

C/007/001-EX00D adequately addresses the requirements of R645-202-241 thru -242.200.

The submittal adequately addresses the requirements of R645-202-243.

The submittal adequately addresses the requirements of R645-202-244. through -244.300.

RECOMMENDATION:

R645-201-223; the applicant must obtain written easement from the Union Pacific Railroad that will allow them access to the two boreholes which appear to be located within the Union Pacific track right-of-way. If it is determined that the proposed borehole locations are not within the track right-of-way, then the applicant only needs to address the other deficiency in this document.

R645-301-800; the current bond should be examined by the UDNR/OGM reclamation bond specialist.

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Regulations R645-301-731.210, -731.211, -731.212, -731.213, -731.214, -731.214.1, -731.214.2, -731.215, -731.220, -731.221, and -731.222, as they relate to surface and ground water monitoring regimes, have already been adequately addressed by the White Oak Mine mining and reclamation plan. They do not need to be addressed in this minor coal exploration application.

Regulation R645-301-731.800 is not applicable to this minor coal exploration application.

Regulations R645-301-742.200 through -742.214 have been adequately addressed in a previous section of this submittal.

Regulations R645-301-742.220; -301-742.221 through -742.240 are not applicable to this minor coal exploration application.

Regulation R645-301-742.300 has already been addressed within this submittal.

Regulations R645-301-763.100 and -763.200 are not applicable to this minor coal exploration application.

This submittal adequately addresses the requirements of R645-202-236 (Acid- or toxic forming materials).

RECLAMATION STANDARDS

Regulatory Reference: 30 CFR 772.13; R645-202-240.

Analysis:

Approximate original contour

Page 20 of 22 of the submittal commits the applicant to the back filling of the associated mud pits during the reclamation process. Approximate original contour will be achieved during the reclamation of the pad areas.

Revegetation

The area will then be scarified and re-seeded using the seed mix which has been previously approved and is shown on page 21 of 22 of the submittal. This will occur in the first favorable seeding window following completion of the exploration activities, (as confirmed on page 14 of 22 of EX00D under 356.400).

The construction of siltation structures, as they relate to this minor coal exploration application, has been previously addressed on pages 14 and 15 of 22 of this submittal under R645-202-235 and R645-301-356.300 and -356.400. Same have been adequately addressed within this submittal.

There are no sedimentation ponds in close proximity to, nor will there be any constructed in association with, this minor coal exploration application.

Requirements of R645-301-742.300 have already been addressed within this submittal.

There are no siltation structures associated with this minor coal exploration application. These regulations are not applicable.

Acid- or toxic forming materials

The requirements of R645-202-236 have been addressed on a partial basis under R645-301-731.110, (see page 15 and 16 of 22 of the submittal). The application commits the permittee to cleaning up and disposing of any fuel contamination, off property, in an approved manner (see page 19 of 22, under R645-202-236).

Findings:

This submittal adequately addresses the requirements of R645-202-231 (Biology).

This submittal adequately addresses the requirements of R645-202-232 (Roads).

This submittal adequately addresses the requirements of R645-202-233 (Topsoil).

This submittal adequately addresses the requirements of R645-202-234 (Diversions of Overland flows and streams).

This submittal adequately addresses the requirements of R645-301-356.300. and -301-356.400.

Regulations R645-301-512.240; -301-513.200; -301-514.300; -301-515.200; -301-533.100 through -301-533.600, as they relate to impoundments, are not applicable to this submittal.

This submittal adequately addresses the requirements of R645-301-731.100 through -731.111.

Regulation R645-301-731.112 is not applicable to this submittal.

This submittal adequately addresses the requirements of R645-301-731.120 through -731.122.

Ground water monitoring will continue to be conducted by the permittee according to the plan which exists in the current mining and reclamation plan. If additional ground water monitoring is required by the UDNR/OGM, it can be requested under R645-301-731.

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Hydrologic Balance

This application commits the permittee to maintain all siltation structures until the reclamation (i.e., revegetation) of the sites has been completed.

The construction of mud pits at the drill sites will be necessary to control the drilling medium and keep it within the exploration site. The pits will be 20' x 20' x 8' in depth (see page 6 of 22 of the submittal). These will be totally incised; the volumes contained will amount to 0.07 acre feet/pit. It is felt that these impoundments do not contain enough volume to warrant the application of the aforementioned regulations.

Page 16 of 22 of the submittal commits the applicant to implement methods for protection of ground water. Earth materials and runoff from the drilling activities will be handled in a manner which minimizes the impact of acid, toxic, or other harmful materials. Mud pits will allow evaporation of drilling water, minimizing the potential for this water to impact surface water systems. Preventive methods will be implemented to prevent the over-topping of mud pits. All exploration boreholes will be plugged for their entire depth to prevent future contamination of ground water systems via surface influx.

Regulation R645-301-731.112 relates to surface coal stripping operations. White Oak Mine is an underground extraction operation.

Regulations R645-301-731.120, -731.121, and -731.122 have been previously addressed under R645-301-731.100 through -731.111.

The application states on page 17 of 22 of C/007/001-EX00D that one or more of the exploration boreholes may be used for water monitoring purposes, depending upon the need for additional hydrologic information from this area. This will be determined by the UDNR/OGM. The application states that if additional ground water monitoring is required, it will be done in accordance with R645-301-731.200 and -731.211 through -731.222.

This minor coal exploration application will be conducted on private surface land which is leased and in the control of Lodestar Energy, Inc., White Oak Mine. **However, three of the proposed boreholes are outside of the Mine's currently approved permit area. Only hole P-01-08-04 is within the current White Oak Mine permit boundary.** The Division approved surface water monitoring plan, as it exists within the mining and reclamation plan, adequately addresses the aforementioned R645 requirements. Coal ownership, as shown on drawing #1.1-3 indicates that White Oak is the owner.

Regulation R645-301-731.800 is not applicable to this minor coal exploration application. Geologic data which will be obtained is relative to an underground extraction process.

evaluation) of ancillary road construction. If the drilling equipment is not able to negotiate a 6% grade, this road will have to be lengthened, but this new length will probably not be more than a maximum of one mile.

Exploration hole P-01-08-01 will be drilled adjacent to an unimproved road which has been in place for many years. The road will be widened in the pre-determined borehole location to establish the drill pad. Upon the completion of the exploration activities, the pad will be reclaimed utilizing the methods described elsewhere in this application. If the Division feels that a ground water monitoring well is necessary in this area, hole P-01-08-01 might be a wise choice due to its proximity to a road which will remain in place. The drill pad will be reclaimed regardless of what determination is made relative to the future of hole P-01-08-02.

All roads associated with this minor exploration application are ancillary, and new roads which were developed to access any boreholes will be reclaimed upon the completion of the coal exploration activities, or during the next available seeding window. All R645 rules relative to primary roads are inapplicable. All pre-existing roads will, upon completion of the exploration activities, be allowed to remain in a condition which is better than they were in prior to the exploration activities.

Topsoil

Lodestar Energy, Inc., White Oak Mine has made a commitment in the application to remove and store the topsoil, which is in place at each exploration site. The resource will be protected by the proper use of silt fences, or other means acceptable to the Division. Topsoil soil removal during exploration road construction will be achieved by side-casting of the material. This is standard practice, as it assists in the rapid redistribution of the resource during reclamation activities. Page 13 of 22 of the submittal commits the permittee to the recovery and stockpiling of topsoil from the drill pad areas; this will prevent contamination of the resource by drilling activities. Redistribution of the soils will occur during the reclamation of the drill sites.

Diversions of Overland flows and streams

The exploration sites will be drilled in areas where the diversion of overland flows will not be necessary. Overland flows are generally very small in nature; should any occur, they will be coursed through utilization of water bars, ditches, and/or culverts. Mud Creek flows in close proximity to all four of the chosen exploration sites. No major diversions are necessary for this minor exploration project.

Drilling water for the four exploration holes will either be trucked in or will be obtained by applying for and receiving a change in the point of diversion from the Utah State Engineer's office (see page 9 of 22). Lodestar Energy has several water rights in place within the area; however, none of them are for industrial use from Mud Creek. The water rights listed on page 9 of 22 appear to be adequate to replace any volumes obtained from Mud Creek, pending receipt of an approved diversion change from the State Engineer's office.

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commitment to conduct the minor coal exploration in accordance with the R645 performance standards relative to same.

The permittee currently has approximately \$5,891,000 worth of bond in place for the White Oak Mine permit area. Based on the Division's 5% rule, \$294,550 should be available for the reclamation of the disturbance associated with the four exploration boreholes. However, it is not known how much contingency money is remaining of the \$294,550 for the reclamation of the four boreholes. The applicant should discuss this issue with the Division's bond specialist.

Findings:

This submittal's commitment to reclaim the drill sites according to the intent of the aforementioned regulation is adequate.

The submittal adequately addresses the requirement of R645-202-220.

R645-301-800; the current bond should be examined by the UDNR/OGM reclamation bond specialist.

OPERATIONAL STANDARDS

Regulatory Reference: 30 CFR 772.13; R645-202-230.

Analysis:

Biology

There are no known threatened or endangered species within the proposed area of exploration. This is verified on pages 8 and 9 of the applicant's submittal.

Roads

Two of the four proposed exploration sites (P-01-08-03 and P-01-08-04) appear to be within the Union Pacific Railroad's track right-of-way. An access road for track maintenance vehicles parallels the track along much of this right-of way. As of the date of the writing of this document (November 16, 2000), the applicant is pursuing easements from the railroad to drill the two holes within the track right-of-way. A stipulation for the approval of this minor coal exploration application is that these easements be in place prior to approval of this application by the UDNR/OGM. If the applicant is unable to obtain the necessary easements from the Union Pacific railroad, it will be necessary for the permittee to construct at least two miles of additional ancillary road to access the pre-determined drill sites for holes P-01-08-03 and 04.

Access to drill hole P01-08-02 will consist of approximately 4,100 feet (based on a 6% grade

R645-201-223; the applicant must obtain written easement from the Union Pacific Railroad that will allow them access to the two boreholes which appear to be located within the Union Pacific track right-of-way. If it is determined that the proposed borehole locations are not within the track right-of-way, then the applicant only needs to address the other deficiency in this document.

COMPLIANCE DUTIES

Regulatory Reference: 30 CFR 772.13; R645-202.

REQUIRED DOCUMENTS

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

Analysis:

This notice of intent to conduct minor coal exploration includes a commitment to distribute copies of the approved finalized notice of intent to conduct minor coal exploration to those individuals (i.e., drillers, geologists, and other agents of the Company) directly associated with the exploration activities. See page 7 of 22 of the submittal.

Findings:

The intent of R645-202-100, regarding distribution of required documents relative to this notice of intent to conduct minor coal exploration has been adequately met.

PERFORMANCE STANDARDS

Regulatory Reference: 30 CFR 772.13; R645-202-200; R645-301-800.

Analysis:

This application commits the permittee to conduct this minor coal exploration according to the performance standards mandated by the R645 rules. Core samples will be recovered; the exploration activities will not substantially disturb the natural land surface. Drill sites will be reclaimed by backfilling mud pits, redistributing any soils removed, and by the scarifying and seeding of the area. Any minor drainages which have been affected will be reshaped and seeded. All seeding will utilize the permanent upland seed mixture approved by a UDNR/OGM Reclamation Biologist as shown on page 21 of 22 of this submittal.

In this application, the permittee, Lodestar Energy, Inc., White Oak Mine, has made a

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Findings:

The Utah Division of Oil, Gas and Mining is the sole party responsible for the review of this minor coal exploration application. All areas to be disturbed are on private land leased by the applicant, Lodestar Energy, Inc., White Oak Mine.

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:

The exploration process will implement the drilling of four boreholes to determine the chemical and physical coal characteristics of the lower O'Connor seam at the chosen locations. Less than 250 tons of coal will be removed as a result of this four hole exploration. This submittal, therefore, qualifies as a minor coal exploration application.

This Notice of Intent to Conduct Minor Coal Exploration includes the following information.

- 1) Regulation 201-221; the name, address, and telephone number of the applicant seeking to explore, (see page 3 of 22 of the submittal).
- 2) Regulation 201-222; the name, address, and telephone number of the applicant's representative responsible for conducting the exploration activities, (see page 3 of 22 of the submittal).
- 3) Regulation 201-223; a narrative and map describing the exploration area and indicating where exploration will occur, (see Drawing #2.2-1, Utah No. 2 Area and Property Boundary and Drill Hole Locations, and page 4 of 22 of the submittal).
- 4) Regulation 201-224; a statement of the period of intended exploration is included, (see page 5 of 22 of the application).
- 5) Regulation 201-225; a description of the method of exploration to be used, the amount of coal to be removed, and the practices that will be followed to protect the area from adverse impacts of the exploration activities and to reclaim the area in accordance with the applicable requirements of R645-202. (See pages 5 and 6 of 22 of the submittal).

Findings:

C/007/001-EX00D qualifies as a minor coal exploration amendment. This notice of intent to conduct minor coal exploration includes sufficient information to adequately address the requirements of R645-201-210 through -201-222 and R645-201-224 through -201-225.