UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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Ref: EPR-N

MAY 18 2009

Steve Rigby, Project Manager
Bureau of Land Management
Price Field Office
125 South 600 West
Price, UT 84501

Re: Greens Hollow Coal Lease Tract Draft EIS
CEQ # 20090088

Dear Mr. Rigby:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) 42 U.S.C. 4232(2)(c) and Section 309 of the Clean Air Act 42 U.S.C. Section 7609, the U.S. Environmental Protection Agency (EPA) Region 8 has reviewed the *Greens Hollow Coal Lease Tract Draft Environmental Impact Statement* (DEIS). Section 309 of the Clean Air Act directs EPA to review and comment in writing on the environmental impacts of any major federal agency action. EPA's comments include a rating of the environmental impact of the proposed action and the adequacy of the NEPA document.

The DEIS proposes the leasing and underground mining of the Greens Hollow Coal Lease Tract (Tract) encompassing approximately 6,175 acres located on the Fishlake and Manti-La Sal National Forests in Sanpete and Sevier Counties, Utah. The DEIS, prepared jointly by the Bureau of Land Management (BLM) and the United States Forest Service (USFS) in cooperation with the Office of Surface Mining Reclamation and Enforcement (OSM), analyzes three alternatives which include a No Action Alternative, a Proposed Action (Alternative 2), and Alternative 3 that was developed to address public concerns. The coal would be made available through competitive leasing, and it is anticipated that access would be available through the extension of existing underground mine infrastructure of the SUFCO mine located adjacent to the Tract. If the Tract were accessed from Muddy Creek Canyon or other nearby sites, new mine portals or other surface access would need to be developed. However no proposals for mine access have been submitted at this time and therefore associated impacts have not been analyzed in the DEIS.

Although there is no guarantee Ark Land Company, owner of SUFCO mine, will be the successful bidder for the Tract, the company has developed a preliminary mining plan for long-wall or full extraction mining through the existing SUFCO mine workings, and this plan is evaluated under the Proposed Action. The Final EIS (FEIS) should address how the associated

environmental impacts would be analyzed and disclosed in the event a new mining plan is developed and/or a different mine access proposal is established as the result of the uncertain competitive bid process. Under the proposed mine plan, approximately 73.4 million tons of in-place coal (approximately 56.5 million tons of recoverable coal) would be available, which would extend the life of the SUFCO mine by approximately 8.8 years, and water discharge to Quitchupah Creek would be covered under an existing National Pollutant Discharge Elimination System permit. Other components of the Proposed Action include associated surface facilities, a power transmission line and road access.

EPA has concerns regarding environmental impacts associated with this project, and believes more mitigation information is needed in certain areas. Based on the document review, EPA is primarily concerned with the air quality impact analysis. Additionally, EPA believes more information should be disclosed in the EIS regarding mitigation measures for potential impacts to surface water, including springs and perennial streams. Although Alternative 3 does not eliminate potential effects on surface water resources, it does minimize the risk for long-term, permanent effects and provides for the least environmental impacts to ground water and perennial streams compared to the Proposed Action. Therefore EPA believes that Alternative 3 is the environmentally preferred alternative.

EPA's role is to evaluate the potential effects of proposed actions and the adequacy of the information in the DEIS. We rate this DEIS an "EC-2" (environmental concerns, insufficient information) outlined in EPA's enclosed ratings criteria. The EC rating indicates that the EPA review has identified environmental impacts that should be avoided in order to adequately protect the environment. We also recommend additional analysis and information to fully assess and mitigate all potential impacts of the management actions. A complete description of EPA's EIS rating system is enclosed, as well as detailed comments used to determine the project's rating.

We appreciate the opportunity to participate in the review of this project, and value BLM's willingness to resolve these matters prior to the issuance of the FEIS. If we may provide further explanation of our concerns during this stage of your planning process, please contact me at 303-312-6004, or Melanie Wasco of my staff at 303 312-6540.

Sincerely,

Larry Svoboda
Director, NEPA Program
Ecosystems Protection and Remediation

Enclosure:

Ratings Criteria

Detailed Comments by the US EPA R8
Greens Hollow Coal Lease Tract Draft EIS
Fishlake and Manti-La Sal National Forests
Sanpete and Sevier Counties, Utah

Air Quality

General Comments

The Greens Hollow Coal Lease is a proposed 10 million tons per year underground coal mine located in Central Utah about 12 miles west-southwest of Ferron, Utah. The facility is located approximately 27 miles to Capital Reef, 82 miles from Canyonlands and 91 miles to Arches National Parks. These are Federal Class I areas under the Clean Air Act, requiring special protection of air quality and air quality related values (AQRVs), such as visibility. There are no nonattainment areas near the project area. The proposed facility's direct emission sources are mobile sources, emergency operation generators, and construction and production fugitive emission-related sources.

The DEIS presents existing air quality summary conditions and an air quality impact analysis that tiers to a previous analysis (MESI 2004) conducted for the Manti-Las Sal Coal Tracts that is nearby and similar to the Greens Hollow Lease action. The current DEIS presents a qualitative discussion of the emission inventory and impacts to the National Ambient Air Quality Standards (NAAQS), prevention of significant deterioration (PSD), and AQRVs that rely on the MESI 2004 analysis which illustrated no adverse impacts.

The MESI 2004 analysis utilized the SCREEN 3 model for the construction near field impacts, ISCST3 model for production near field impacts and VISCREEN model for far field visibility impacts. For the MESI 2004 construction analysis, the maximum PM10 impact was 145 μg/m3, which is very near the 24-Hour PM10 NAAQS of 150 μg/m3. The construction PM10 emissions from the MESI 2004 to the Greens Hollow actions have increased from 36 tpy to 55 tpy. Since the PM10 emissions increased and MESI 2004 action predicted PM10 very near the 24-hour NAAQS, we recommend that a near-field analysis be reanalyzed that incorporates the new construction and production changes. In addition, Section 4.13.2 of the DEIS states that the CIRRUS 2004 study "did not evaluate PM2.5 impacts because the regulation was not in effect at that time." We recommend the Final EIS present a PM2.5 air quality impact analysis as the mobile and nonroad sources, construction activities, stockpiles, and emergency diesel generators will emit primary and secondary PM2.5 emissions.

The MESI 2004 analysis for heavy duty haul truck traffic incorporated emissions on unpaved and paved portions of the project up to Highway 10. It is unclear to EPA where the proposed facilities' coal is transported after reaching Highway 10. It is our understanding that the nearest rail coal load out facilities are over 80 miles from the facility and 30 miles to the nearest coal fired power plant (Huntington, UT). A coal production capacity of 10 million

tons/year will have a significant level of associated heavy duty truck traffic emissions over many miles that should be identified in the FEIS. EPA recommends that a far field analysis be conducted that incorporates changes to construction and production emissions, including mobile source traffic and emergency generators, for the proposed facility.

Finally, EPA recommends that the FEIS include a more complete detailed summary of information used in the air quality impact determination, such as specific sources included in the emission inventory (stationary, mobile and nonroad emission sources), identification of air dispersion models (AERMOD/CALPUFF), base and future case model years, analysis assumptions and estimates, etc. All modeled results should be presented in the FEIS for all NAAQS, PSD and AQRVS parameters.

EPA offers more specific comments below:

1. Table 3.19 presents the 8-hour Ozone standard as 0.08ppm. The current 8-hour Ozone standard is 0.075ppm.

2. Section 3.13.6.1 of the Draft EIS, Air Methane, presents methane emission rate of 1,621 tons per year. EPA has identified coal mining as the 2nd largest emitter of methane gas in the nation from energy (http://epa.gov/climatechange/emissions/downloads09/Energy.pdf). EPA is concerned the Draft EIS methane emission rate is being under reported and should be verified for the Final EIS. In addition, EPA acknowledges that coal mine methane may contain low concentrations of nonmethane organic compounds (NMOCs). However, given the high methane emission rates associated with coal mines, the NMOC emission rates may be considerable. The Final EIS should present an actual compositional analysis and estimate of emissions of major NMOCs for the mine. Furthermore, EPA recommends that air modeling for NMOCs be conducted for high NMOC emission rates.

Water Resources

The primary perennial streams in and around the analysis area are Muddy Creek, North and South Forks of Muddy Creek, South Fork of Quitchupah Creek, and intermittent perennial flow is present in Cowboy Creek, Greens Hollow, Greens Canyon, and the North Fork of Quitchupah Creek (see DEIS page 63). There are 30 springs in the project area (33 in the study area) and 106 other wetlands, totaling 23 acres (DEIS page 78). Classification was completed on these springs and 14 were classified as high value, meaning they are located within 25 feet of wetland areas, provide surface tributary flow to the adjacent wetland, or were developed in support of human or livestock use. There were 14 additional springs that were classified as moderate value, which indicates that they are located within 500 feet of wetland areas or riparian corridors (see DEIS Table 3.2, page 59). The DEIS notes that changes caused by subsidence may alter the flow of springs and seeps, which could impact wetlands riparian vegetation and adversely affect dependent ecosystems.

According to the DEIS, Alternative 3 was developed as a result of environmental concerns raised during the scoping period. This alternative focuses on reduction of subsidence impacts to surface resources, and evaluates the use of no subsidence mining (or no leasing) in strategic areas based on locations of perennial streams where water loss could occur. Mining would be eliminated from sensitive areas, including stream segments with shallow overburden over the Castlegate Sandstone and along cliff escarpments. The DEIS states "Mining would be restricted in the North Fork of Quitchupah Creek, Muddy Creek, Cowboy Creek, and Greens Hollow drainages where the overburden is insufficient to facilitate healing of surface tensile cracks" which "would minimize the risk of water displacement, or loss in the case of Muddy Creek" (DEIS page 119). All of the perennial streams mentioned above could potentially be undermined under the Proposed Action. In the Proposed Action, mine subsidence could affect surface flows in the segment of Muddy Creek, which could result in a transbasin diversion (see DEIS page 125). The DEIS also warns that subsidence of perennial streams could intercept flowing/impounded water and divert it underground, thus changing the hydrology. Any change in stream gradient could cause changes in stream morphology, which could eventually have an adverse affect on wildlife, including the Colorado River cutthroat trout which is of particular concern.

Based on the potential impacts of the Proposed Action on water resources, EPA believes that Alternative 3 is the environmentally preferred alternative. Although monitoring recommendations and mitigation measures are mentioned in the DEIS, there does not appear to be enough information on how mitigation measures will be implemented. For example, page 139 of the DEIS states "Changes in spring discharge that occur as a result of subsidence would have to be mitigated," however there is little detail as to what that mitigation would entail. Additionally, although stream channel flows will be monitored in the spring and fall at all springs located near longwall panel boundaries to track water loss, thresholds are not established/disclosed in the DEIS to identify management alternatives and mitigation that would be implemented should a threshold be exceeded. Inclusion of thresholds and management alternatives in the FEIS is recommended, as well as additional details on mitigation measures.

Other Considerations

There appears to be an inconsistent value for the amount of recoverable coal left in place regarding Alternative 3. For example, page 41 of the DEIS states that there will be 900,000 tons, while page 201 reports 3,900,000 tons.

Another matter that should be noted is the discussion throughout the DEIS regarding the mine plan developed by Ark Land Company. EPA understands that this entity may not be the successful bidder for the tract, however, statements within the DEIS regarding the company's mining plan seem to be misleading and/or contradictory at times. For example, page 120 of the DEIS states that the "Ark Land Company has developed an example of a mining plan for full extraction mining that was used to evaluate potential impacts to water resources." Subsequently, page 128 states "Without reference to a specific mine plan, it is not possible to assess which of the springs may be at potential risk of impact due to tensile fractures or compression." EPA understands that at this time there is no guarantee that the Ark Land Company will win the bid

and therefore the mining plan and related environmental impacts may be either refined or significantly different in the FEIS analysis depending on the successful bidder. However, it should be noted that discussion regarding the preliminary mining plan should be consistent on how the plan was utilized in the DEIS analysis.

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements

Definitions and Follow-Up Action*

Environmental Impact of the Action

LO - - Lack of Objections: The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC - - Environmental Concerns: The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO - - Environmental Objections: The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU - - Environmentally Unsatisfactory: The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 - - Adequate: EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 - - Insufficient Information: The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 - - Inadequate: EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.