



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

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June 1, 2007

8EPR-N

Charles Richmond, Forest Supervisor  
Grand Mesa, Uncompaghre, and  
Gunnison National Forests  
2250 Highway 50  
Delta, Colorado 81416

Re: Draft Environmental Impact Statement,  
Deer Creek Shaft and E Seam Methane Drainage  
Well Project, Gunnison County, Colorado,  
CEQ #20070104

Dear Mr. Richmond:

In accordance with our responsibility under Section 309 of the Clean Air Act, 42 U.S.C. Section 7609, and the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4332(2)(C), the United States Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (EIS) for the Deer Creek Shaft and E Seam Methane Drainage Wells Project as part of the West Elk Mine.

The proposed action authorizes the Mountain Coal Company, LLC (MCC) to drill 168 methane drainage wells on 137 drilling pads, a new 28-foot diameter ventilation and escape way shaft, and about 19 miles of new roads associated with access to these facilities. Since the West Elk Mine encounters methane of sufficient concentrations to present a risk of explosion, methane removal is necessary for mine safety. The Forest Service intends to authorize MCC access on forest lands in order to drill methane drainage wells to avoid explosive methane gas conditions in the mine and thereby meet Mine Safety and Health Administration mine safety requirements. The methane would be vented to the ambient air.

EPA understands and certainly supports the need to vent methane from the mine to address important mine safety concerns. We recommend, however, that the final EIS identify the magnitude of the emissions and discuss alternatives to allowing the methane resource to be vented directly to the atmosphere. Specifically, we recommend that the

final EIS describe the range of alternative technologies available for capturing the methane and the potential economic and environmental benefits associated with capturing and utilizing a portion of the methane emissions.

The draft EIS does not present information on the amount of methane that is expected to be released from the proposed action. This is of particular concern because, based on information reported to EPA by the MCC, the West Elk Mine releases large quantities of methane to the atmosphere. For example, MCC reported to EPA that in 2005, the West Elk Mine vented approximately 8.2 billion cubic feet of methane. Approximately one-half of the methane from the West Elk Mine was drained from borehole drainage wells and the other half released in diluted concentrations in mine ventilation. We recommend that the final EIS for this project include this information.<sup>1</sup>

As indicated on EPA's website, methane is a greenhouse gas that remains in the atmosphere for approximately 9-15 years and is over 20 times more effective in trapping heat in the atmosphere than carbon dioxide (CO<sub>2</sub>) over a 100-year period. Methane's relatively short atmospheric lifetime, coupled with its potency as a greenhouse gas, makes it a candidate for mitigating global warming over the near-term (i.e., next 25 years or so.) Methane is emitted from a variety of natural and human-influenced sources. In the U.S., underground coal mines are the largest source of coal mine methane (CMM) emissions accounting for about 75 percent of all CMM emissions. Air emitted from mine ventilation shafts is the largest source of underground emissions. For more information, please see EPA's methane web site at <http://www.epa.gov/methane>

EPA supports energy conservation as an important pollution prevention measure, and notes that the Council on Environmental Quality's (CEQ's) memorandum on energy conservation encourages federal agencies to incorporate pollution prevention principles, techniques, and mechanisms into their planning and decision-making processes and to evaluate and report those efforts, as appropriate, in documents prepared pursuant to NEPA. Moreover, EPA's Coal bed Methane Outreach Program, which began in 1994, is a voluntary program through which the U.S. coal industry has captured and used 308 billion cubic feet (Bcf) of coal mine methane. The 10 active mines in the U.S. with methane capture projects operating in 2002 used 44 billion cubic feet of methane, which offset almost 18 million metric tons of carbon dioxide emissions. In turn, this provided enough energy to heat 638,000 homes. To date, such efforts are being accomplished in underground coal mines in Alabama, Virginia, West Virginia, and Pennsylvania. Indeed, the portion of the West Elk Mine's methane released from the drainage wells would be sufficient to heat several thousand homes, and has a value of approximately \$15 to \$25 million dollars annually. Given the project's release of significant quantities of

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<sup>1</sup>We have reviewed the DEIS with respect to information provided regarding potential methane emissions. Since the issuance of the April 2, 2007 Supreme Court opinion in *Massachusetts, et al. v EPA*, 549 U.S.\_\_\_\_\_(2007), EPA has not yet determined the path forward with respect to addressing emissions of greenhouse gases under relevant regulatory portions of the Clean Air Act. Thus, our comments on emissions here do not reflect, and should not be construed as reflecting, the type of judgment that might form the basis for a positive or negative finding under any regulatory provision of the Clean Air Act.

methane, there is an important economic and environmental opportunity here to capture and utilize the methane resource.

Given the potentially significant amount of methane that will be released from the project, we recommend that the final EIS analyze measures for capturing all or a part of the methane to be vented from the mine. While EPA understands that there is no lease in place that would allow the methane encountered as a by-product of the mining to be captured and put to beneficial (i.e., profitable) use, the lack of a lease should not preclude evaluation of measures to capture and reuse this resource. CEQ's regulations direct an agency to analyze reasonable alternatives not within the jurisdiction of the lead agency. Methane capture and reuse is a reasonable alternative to the proposal of venting the methane to the atmosphere, and thus, we recommend that it be analyzed.

In light of our concerns about the draft EIS and the proposed project, we have rated the document as Environmental Objections (EO) -2. A description of EPA's rating system is enclosed. EPA believes the information in the DEIS is insufficient and the missing information and analyses are substantial issues which must be resolved and disclosed in the Final Environmental Impact Statement. Along with this rating comes a commitment from EPA to work closely with you and your staff in resolving these significant issues.

EPA proposes that we meet to discuss our concerns about the draft EIS, and to begin working collaboratively to resolve these concerns. Towards that end, I have directed Larry Svoboda, Director, NEPA Program, to initiate the process of scheduling the necessary meetings. He will be contacting your office shortly. In the interim, please feel free to call me at 303-312-6308, or Larry (303-312-6004), if you have any questions.

Sincerely,

*original signed by:*

/s/ Kerrigan G. Clough  
Deputy Regional Administrator

Enclosure

cc: Jim Martin, Executive Director, CDPHE, Denver, Colorado  
Sally Wisely, Colorado State Director, BLM, Lakewood, Colorado  
Richard Stickler, Assistant Secretary of Labor for Mine Safety and Health,  
Washington, D.C.