



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

1595 Wynkoop Street  
DENVER, CO 80202-1129  
Phone 800-227-8917  
<http://www.epa.gov/region08>

AUG 01 2008

Ref: EPR-N

Mr. Don Simpson, Acting State Director  
Bureau of Land Management  
Wyoming State Office  
5353 Yellowstone Road  
Cheyenne, Wyoming 82009

Re: Final Supplemental Environmental Impact  
Statement for the Pinedale Anticline Oil and Gas  
Exploration and Development Project  
Sublette County, Wyoming CEQ #20080249

Dear Mr. Simpson:

In accordance with our responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4332(2)(C), and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609, the U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the Final Supplemental Environmental Impact Statement for the Bureau of Land Management's (BLM) proposed Pinedale Anticline Oil and Gas Exploration and Development Project (Final SEIS).

The Final SEIS supplements a previous EIS and a 2000 Record of Decision (ROD) authorizing up to 700 producing wells in the Pinedale Anticline Project Area (PAPA). The proposed project includes the year-round drilling, completion and production of up to 4,399 additional natural gas wells on up to 12,885 acres of new disturbance within the PAPA. The year-round drilling is proposed within certain areas of the PAPA that coincide with big game crucial winter habitats and greater sage grouse seasonal habitats. BLM's Preferred Alternative also includes a potential development area (PDA), which provides for potential year-round development within a total of 70,200 acres.

EPA's February 14, 2008 comment letter rated the December 2007 Revised Draft SEIS as "Environmentally Unsatisfactory – Inadequate Information" (EU-3) because of significant, adverse, long-term impacts to air quality and groundwater quality. Specifically, EPA raised concerns about potential adverse impacts to visibility in federal Class I areas without mitigation; the extent of groundwater contamination in the PAPA where development has already occurred; the potential for additional groundwater contamination impacts that may occur with the proposed project; and monitored and modeled exceedances of the revised ozone National Ambient Air Quality Standard (NAAQS). In addition to these concerns, EPA noted the Revised Draft SEIS

provided an inadequate analysis of the existing groundwater contamination and the extent of potential groundwater impacts; and inadequate air quality modeling analysis to disclose the predicted ozone concentrations under varying emission scenarios.

Following the issuance of our comment letter, EPA, the BLM, and the Wyoming Department of Environmental Quality (WDEQ) engaged in a series of collaborative sessions aimed at resolving EPA's concerns about the proposed project. EPA appreciates the conceptual framework presented in BLM's April 21, 2008 letter and included in the Final SEIS to address these issues. Nevertheless, EPA remains concerned about these issues because of the lack of detail presented in the Final SEIS for the respective mitigation plans, and the lack of a firm schedule for achieving the respective mitigation goals. With this in mind, we offer the following comments and suggestions.

## **Ozone**

To address the existing and predicted exceedances of the ozone NAAQS in the Pinedale area, the Final SEIS presents BLM's commitment that the proposed project will not contribute to an ozone violation. In order to accomplish this goal, the Final SEIS indicates that the WDEQ is in the process of implementing the 2004 and 2007 BACT requirements. Additionally, the document explains that, within one year of issuing the ROD, and as needed thereafter, BLM, WDEQ, and the operators, with input from EPA, will refine the NOx and VOC emissions inventory and conduct new modeling. BLM, WDEQ, and the operators will evaluate the modeling results, and if needed, sequentially review and employ the most effective technologies available to reduce ozone. Such actions to reduce the likelihood of ozone exceedances would include reduction in the number of holding tanks, greatly reduce numbers of truck trips, and switching from diesel to natural gas powered engines. Absent an effective technology to implement, reductions in the pace of development will be utilized to lower impacts to acceptable levels identified in this SEIS and applicable laws or regulations. EPA agrees that these measures are important steps to achieving the BLM's goal regarding the project's predicted ozone impacts, and strongly recommends that they be included in the ROD. Further, we suggest that the ROD also clarify and expand upon these commitments by including the following:

- To strengthen the commitment to the goal of zero days of ozone exceedances, the mitigation plan should establish a date for meeting the goal.
- In addition to the WDEQ's implementing the 2004 and 2007 BACT requirements, the mitigation plan should evaluate and require other actions (i.e., reduction in the number of truck trips; switching from diesel to natural gas fired engines; and reduced pace of development) which can be implemented in the short-term to reduce the emissions of ozone precursors.
- In addition to consulting with EPA on the development of the Air Quality Modeling Protocol, we suggest that the BLM and WDEQ involve appropriate stakeholders. We also recommend the air quality modeling include a "sensitivity" analysis to determine an emission control strategy to reduce ozone precursor emissions.

- Develop a process for informing the public of the results of the air quality modeling and the progress in meeting the necessary reductions.
- Discuss how adaptive management will be used to ensure the ozone NAAQS is achieved.
- Assess the adequacy of the existing monitoring network on a periodic basis, based on the modeling results. This assessment would include adding monitors in and around the PAPA, as needed.

## **Visibility**

The Final SEIS clarified that the project will achieve the goal of zero days of modeled visibility impairment in vicinity Class 1 Areas, and any mitigation necessary to achieve the goal will be implemented. BLM, WDEQ, and the operators will work together to evaluate impacts, and if needed, sequentially review and employ the most effective technologies available to address impacts to visibility. Absent an effective technology to achieve further reductions beyond the 80 percent committed to in the Final SEIS, adjustments in the pace of development will be utilized to achieve the goal. EPA agrees that these measures are important steps for achieving the BLM's goal regarding the project's predicted visibility impacts, and strongly recommends that they be included in the ROD. However, to further clarify and support BLM's commitment to protecting visibility, we suggest that the following elements be included in the ROD:

- As presented in the Final SEIS, five years after signing the ROD (i.e., when the 80% reduction is to be achieved), there could still be 10 days of project-related visibility impairment in the Class 1 Bridger Wilderness Area. With this in mind, the ROD should provide a specific timeframe for meeting the goal of zero days with annual interim milestones for emission reductions.
- Identify effective and enforceable mitigation strategies (i.e., electric compression, Tier 2 drill rigs, reduction in the number of drill rigs) to ensure achievement of the visibility goal.

## **Groundwater**

The Final SEIS discloses that the areal extent of benzene in groundwater exceeding the Drinking Water Standard maximum contaminant level (MCL) is more wide spread than indicated in the Revised Draft SEIS. Benzene levels exceeding the Drinking Water Standard MCL have been monitored in 14 wells. Further, the Final SEIS indicates the benzene and hydrocarbons are identified in groundwater, extending over 28 miles of the PAPA. The Final SEIS commits to the development and implementation of a science-based "Groundwater/Aquifer Pollution Prevention, Mitigation, and Monitoring Plan" to address this issue. While EPA believes that this approach is an important step for the long term, we believe that the ROD should describe measures that will be implemented to address this problem in the near term. Between February

and April 2008, EPA, BLM and the WDEQ worked collaboratively to develop a mitigation table of recommended groundwater mitigation/protection measures; we recommend that this mitigation table be included in the ROD. Since the nature and full extent of the benzene levels are not clearly understood and benzene is a known human carcinogen, EPA recommends that mitigation measures identified in the mitigation table be implemented in the near term. This may ensure protection of groundwater aquifers until completion of the Groundwater/Aquifer Pollution Prevention, Mitigation and Monitoring plan. We also suggest that the Groundwater/Aquifer Pollution Prevention, Mitigation and Monitoring plan include and build upon this mitigation table.

### **Other concerns**

EPA is concerned about the “technically and economically feasible” language within the introductory paragraph of the BLM’s Practices and Restrictions for the PAPA found in Appendix 4 of the Final SEIS. The Draft SEIS did not include this language which seems to contradict previous agreements to eliminate such ambiguous language. EPA recommends the ambiguous “technically and economically feasible” language be removed and BLM’s commitment to the restrictions and measures in Appendix 4 be clarified and strengthened in the ROD.

As noted above, there are a number of clarifications and adjustments to the various mitigation plans and schedules that we would like to have included in the PAPA ROD. Moreover, we reiterate our offer to work collaboratively with the BLM and the WDEQ to address these outstanding issues.

If you have any questions, please contact me or Larry Svoboda, Region 8 NEPA Program Director, at 303-312-6004, or Carol Campbell, Assistant Regional Administrator of Ecosystems, Protection and Remediation at 303-312-6340.

Sincerely,



Carol Rushin  
Acting Regional Administrator