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Ref: 8ERP-N

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Department of the Interior
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Washington, DC 20240

Robert Bennett, Director
Wyoming State Office
Bureau of Land Management
5353 Yellowstone Road
Cheyenne, WY 82009

RE: Comments on the Jonah Infill Draft EIS Air Quality
Impact Analysis Supplement – CEQ#050044

Dear Ms. Clarke and Mr. Bennett:

The Region 8 Office of the Environmental Protection Agency (EPA) has reviewed the referenced Draft Environmental Impact Statement (DEIS), and the Jonah Infill Draft EIS Air Quality Impact Analysis Supplement (AQIAS) for the Jonah Infill Drilling Project, Sublette County, Wyoming. The review has been performed in accordance with our responsibilities under the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4321, et. seq., and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609.

We commend the Bureau of Land Management (BLM) for the outstanding cooperation and collaboration on this important project and on the modeling analysis that was provided in the supplemental air quality information. This was a significant effort on BLM's behalf to provide the necessary information on air quality to the public for review and comment. The complexity of the project and the importance of protecting Class I airsheds required a level of analysis that was innovative and comprehensive. We have assigned a rating of "1" which acknowledges that the supplemental air quality analysis has adequately disclosed the most significant impacts associated with the development of the Jonah gas field and identified a range of mitigation options which, if implemented, will significantly reduce or eliminate all adverse air quality impacts.

We look forward to reviewing the additional information as requested in our earlier comments, but we consider the draft EIS and supplemental information to have provided adequate disclosure and analysis under the requirements of the National Environmental Policy Act and its implementing guidelines. We believe that BLM may be in a position when developing the final EIS to include additional detailed information on the specific means to mitigate emissions from drilling operations to achieve or exceed the 80 percent reduction, including the implementation of the mitigation in the "early project development stage" to minimize or prevent air quality impacts to Class I airsheds. We

recommend that such information be included in the Final Environmental Impact Statement.

Our respective agencies have made significant and groundbreaking progress in working with the Wyoming Department of Environmental Quality (Wyoming DEQ) to assure that the environment will be protected as our needed energy resources are developed. It is our view, as this letter will support, that the work of our three agencies is not yet complete. We look forward to working with BLM, Wyoming DEQ, and others to minimize the environmental consequences of energy development.

EPA understands that our previous comments on the Jonah Infill project will be incorporated with these additional comments on the air quality portion of the DEIS. This letter also communicates our rating of the entire compilation of DEIS documents. As our previous comments provided background on the project alternatives, that discussion will not be repeated within this comment letter and we refer you to our comments to Carol Kruse dated May 25, 2005.

When the supplemental air quality information was first submitted, no single preferred alternative had been identified. During the process of this review, we received from BLM a written notification, dated October, 5, 2005, from Deputy State Director Donald A. Simpson, that the 80 percent emission reduction alternative was now the BLM's preferred alternative. Accordingly, we have not rated the other alternatives. Our work on those alternatives, before the preferred alternative was chosen, had indicated that those other alternatives would have been rated environmentally unsatisfactory because of extensive impact on nearby Class I Wilderness areas; therefore, we commend the BLM for their support of the 80 percent reduction alternative.

It is important to note that, even with the preferred alternative, there will be some visibility impacts directly related to the project. We believe those impacts merit a rating of Environmental Concerns (EC) but that phased development, Tier II (or better) engines, and other technological changes - some of which are already in use - can reduce or eliminate all exceedances of the visibility thresholds.

Therefore, the rating of the entire DEIS, reflecting both our previous and current comments, is EC-1.

The Clean Air Act requires special protection of air quality and air quality related values (such as visibility) in many of the nation's wilderness areas and national parks. In addition to the general provisions in the Act, Subpart II of Part C of the Clean Air Act contains a program specifically for the protection of visibility in federal Class I areas that establishes "as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory class I federal areas which impairment results from manmade air pollution." EPA's implementing regulations require states to submit implementation plans that contain such measures as are necessary to make reasonable progress towards the national requirements, and that states establish reasonable progress goals towards improving visibility on the worst days and preventing further degradation in visibility during the best days. Actions by BLM that do not include adequate mitigation for visibility impacts could impede Wyoming's ability to submit a regional haze State Implementation Plan (SIP) that meets these requirements.

In addition to the visibility program, Subpart I of Part C of the Clean Air Act contains general provisions under the Prevention of Significant Deterioration (PSD) program aimed at protecting federal Class I areas from air quality degradation. The PSD program places an affirmative responsibility on federal land managers (FLMs) to protect air quality in many of the most important national parks and wilderness areas in the nation from human caused air pollution. The Wilderness Act further directs the

federal land management agencies to protect the wilderness character of those areas designated as wilderness. In that Act, Congress recognized the importance of preserving designated areas in their “natural condition” and declared a policy to “secure for the American people of present and future generations the benefits of an enduring resource of wilderness.”

The Air Quality Impact Analysis Supplement (AQIAS) report notes that BLM considers a 1.0 deciview change as a significant adverse impact. This is consistent with other federal agencies’ approach to visibility protection. Pursuant to the Clean Air Act and other provisions of law, EPA and the FLMs have developed regulations, guidance, technical tools (models), and data for the protection of air quality in federal Class I areas. One of these is a guidance document from the Federal Land Managers’ Air Quality Related Values Workgroup (FLAG), a workgroup which was formed to develop a more consistent approach for FLMs to evaluate air pollution effects on the areas which they manage. The FLAG guidance document states that impacts greater than 1 deciview would be considered perceptible and significant for new source review purposes. EPA’s recently issued Best Available Retrofit Technology (BART) guidelines notes that States should consider a 1.0 deciview change or more from an individual source to cause visibility impairment, and a change of 0.5 deciviews to contribute to impairment. Overall, in assessing the import of predicted visibility impacts, EPA recommends that States consider the frequency, magnitude, and duration of impairment.

Preferred Alternative (80 Percent Emission Reduction Case) - EPA understands that mitigation strategies under this alternative would apply from the outset of the project and include the period known as the “early project development stage” in the supplemental material (see our attached specific comments). It is only with this understanding that EPA rates the 80 Percent Emission Reduction Case as EC-1 (Environmental Concerns) in that this proposed alternative includes mitigation or phased well development rates which would allow field development and also provide better protection of air quality, in general, and in the Bridger/Fitzpatrick Wilderness areas, specifically. The large and numerous diesel engines used for drilling wells in the geologic formation of the Jonah Field are the largest source of air pollution emissions from the proposed project. EPA supports this alternative which provides a slower pace of development for the Jonah Field (fewer wells allowed per year) unless the operator secures new and clean diesel engine technology for well drilling operations. If emissions are reduced, the operator would be allowed to drill more natural gas wells and energy development could proceed with assurance that air resources within Wyoming are being protected.

EPA believes that the 80 percent reduction scenario is a reasonable and attainable approach given recent developments. EPA Tier II diesel engines standards go into effect on January 1, 2006. These cleaner engines will reduce NOx emissions by approximately 75 percent from uncontrolled diesel engines. While the immediate availability of these new engines will be uncertain, there are other developments in southwestern Wyoming which demonstrate the potential for reducing drilling rig emissions in the short term. Some gas operators have successfully demonstrated the retrofit of existing engines to perform at or below emission rates of the Tier II (or Tier III) standards. The use of dual fuels (combination of natural gas and diesel fuel) shows promise, as well as selective catalytic reduction applied to new or existing engines. In addition, EnCana has acquired a natural gas fired drilling rig and is currently using this low emitting unit in the Jonah field. We further understand that EnCana is evaluating the feasibility of providing electrical service to the Jonah field to power drilling rigs with direct electrical power. This option could reduce emissions from the Jonah field to negligible amounts. In addition to technological solutions, there are many options for either BLM or the Wyoming DEQ to control the rate of well development to correspond with the availability and use of cleaner drilling rigs beginning with the early project development phase.

While EPA supports this alternative as a viable way of proceeding with gas development in the Jonah Field, EPA remains concerned about the phase-in of the mitigation and the three days of visibility impairment above one deciview at the Class I Bridger Wilderness Area. Although not included as an alternative, the early project development stage and its eight days of direct project visibility impact (nine days when calculated using IMPROVE background data) are considered equivalent to the “High Emissions Case” alternative which EPA is not rating, as discussed above. However, mitigation strategies for the early phase of the project should apply from the outset of the project, not as a future consideration. Accordingly, EPA pledges to continue to work with BLM to determine a schedule for mitigation implementation which protects air quality while proceeding with the Jonah Infill Drilling Project.

We have enclosed a description of EPA’s rating criteria for your information. We are committed to continuing our work with the BLM to find the approach which allows development of our needed energy resources while fully protecting the environment. Accordingly, we would like to meet and discuss this issue with you in the very near future. Meanwhile, if you have any questions concerning our comments, please contact me at 303-312-6308 or Larry Svoboda at 303-312-6004.

Sincerely yours,

Robert E. Roberts
Regional Administrator

/s/

Enclosures

cc: John Corra, Wyoming DEQ
Dan Olson, Wyoming DEQ
Don Simpson, Deputy Director, Wyoming BLM
Carol Kruse, Wyoming BLM, Pinedale Field Office

**Jonah Infill Draft Environmental Impact Statement
Supplemental Information
Detailed Comments**

1. The DEIS Air Quality Impact Analysis Supplement presents the results of modeling of regional impacts at a stage when the Jonah Infill Development Project would be early in its development (nominally the year 2006). Table 5 of the supplement shows cumulative visibility impacts greater than 1.0 deciview (dv) at several Class I and sensitive Class II areas in the region. The table also shows direct project impacts of nine days with impact greater than 1.0 dv at the Class I Bridger Wilderness Area, two days at the Class II Popo Agie Wilderness Area, and one day at the Class II Wind River Recreational Area. The supplement explains that BLM intended to apply this portion of the analysis to cumulative, regional impacts early in the life of the project and stipulates that results for the early project development stage are not directly comparable to the other results. However, the results show the potential of significant, direct project impacts on visibility in the early project development stage.

The supplemental document is unclear as to the mitigation that would apply to the early project development stage for air quality. We understand that the preferred alternative was modeled for the project and cumulative impacts based on assumptions that would exist in the year 2017 when the project would incur maximum air emissions from production and drilling. Although BLM has identified the mitigation necessary to reduce impacts to Class I air sheds for the maximum project emissions in the year 2017 for the preferred alternative, BLM does not identify mitigation necessary to reduce the potential for impacts prior to the maximum project emission date. The results of modeling for the early stage of the project show a need for mitigation beginning in 2006 (or 2007 if the project were to be delayed until that year and BLM still considered the results to be applicable).

EPA assumes that the mitigation strategies used to achieve the 80 percent emissions reduction scenario selected by BLM as the preferred alternative also will apply to the early project emissions. The FEIS and Record of Decision should explain the association between the results for the early project development stage and those modeled for project alternatives that could exist in 2017, and means of mitigating undesirable visibility impacts early in the project.

2. Section 2.1 Impacts Summary – Page 6. The document states in paragraph 1, “...and a high emissions mitigation case with an 80 percent emission reduction at a WDR [well development rate] 250, are representative of the full range of impacts for those 10 configurations.” While the emission reductions assumed in the mitigation runs were decreases from the high emissions case with a development rate of 250 wells per year, the actual examples of mitigation shown in table 3 show well development rates of 50 and 75 wells per year. The DEIS does not demonstrate how emissions could be reduced by 80 percent if development remained at 250 wells per year; consequently it would be more accurate to refer to “an 80 percent emission reduction from the high emissions case.” We recommend revising this sentence and similar references in the FEIS.

3. Ozone. Through the period of developing, conducting, and documenting the air quality analysis for the JIDP, there have been discussions among BLM, EPA, and other stakeholders regarding the method of calculating potential ozone impacts. BLM used a variant of EPA's *VOC/NOx Point Source Screening Tables*, September 1998 (the Scheffe method). By using average monitored ozone values instead of peak concentrations as background in this calculation, BLM showed project impacts less than the one-hour and eight-hour ozone standards. The estimated ozone concentrations would have exceeded the standards if peak monitored concentrations had been used as background instead.

BLM conducted the ozone analysis for a grouping of sources in the JIDP; the method is not conducive to realistically analyzing each development alternative. We acknowledge that the method is not entirely satisfactory regardless of whether one uses peak or average concentrations as background. The question and answer document that BLM posted on the Internet with the supplemental materials for the DEIS included the following statement:

“In February 2005 ozone levels monitored in the Jonah Field may have exceeded national health-based standards. Resolution and verification of exceeding ozone thresholds has not been completed.”

The statement refers to data that were unavailable at the time of the air quality impact analysis. We are concerned that the NEPA process for the Jonah Infill project might culminate while a question of regional ozone impacts is unresolved. Consequently, we recommend that BLM address in the FEIS the potential need for adaptive management to mitigate ozone impacts in the future.

4. Appendices B and D show that the emissions modeled for the early project development stage were greater than the emissions modeled in several of the scenarios projected for 2017. However, the modeled impacts of the early project development stage were substantially lower than the impacts of some future scenarios with lower emissions. For example, while the NO_x, SO₂, and PM_{2.5} emissions for the early project development stage were 19 to 26 percent higher than those for the scenario with 40 percent reduction from the high emissions case in 2017, the corresponding visibility impacts had a reverse relationship; the modeling for the early project development stage showed eight days with a visibility impact greater than 1.0 dv at the Bridger Class I area whereas the modeling for the scenario with 40 percent emissions reduction showed 14 days (both using FLAG background data) of impact greater than 1.0 dv. As stated above, we acknowledge that the two cases are not directly comparable. The FEIS should reconcile and explain this situation.