



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

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August 31, 2020

Ref: 8ORA-N

Mr. Duane Spencer, Acting State Director
Bureau of Land Management
Attn: Mr. Mike Robinson
Casper Field Office
2987 Prospector Drive
Casper, Wyoming 82604

Dear Mr. Spencer:

The U.S. Environmental Protection Agency Region 8 has reviewed the Bureau of Land Management's 2020 Final Environmental Impact Statement (EIS), CEQ No. 20200149, and Proposed Resource Management Plan Amendment (RMPA) that analyzes the Converse County Oil and Gas Project. We conducted this review pursuant to Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA). The Final EIS evaluates the potential impacts associated with the Proposed Action Alternative (Alternative B, the preferred alternative) that includes up to 5,000 new oil and gas wells that would be drilled on 1,500 single and multi-well pads over a period of 10 years. Additionally, the RMPA would modify the Casper RMP to allow relief from timing limitation stipulations for non-eagle raptors within the project area. Please note that this letter is not intended as a protest under BLM's protest process, rather it is intended to inform the Record of Decision that is expected later this year.

We note that the Project's projected water use in the Final EIS has approximately doubled compared to the estimate in the Draft EIS. We specifically appreciate that the operators have committed to implement a substantial water recycling program so that raw water consumption will not increase even with the increased water use. We also appreciate the opportunity to participate in the development of the air quality assessment for this project through the cooperating agency process. We recognize BLM's efforts in providing additional analysis for the air quality assessment as a result of its coordination with the Interagency Air Review Team (IART) workgroup. The meeting with the operator group and IART was also helpful to discuss the analysis and options to reduce air quality impacts.

The Final EIS predicts this project will cause exceedances of EPA's human health-based National Ambient Air Quality Standards (NAAQS). This letter offers comments on the air quality assessment that are consistent with those we shared early in the NEPA process and includes our recommendations for avoiding NAAQS exceedances and reducing the possibility of public exposure to unhealthy levels of air pollution. These comments and recommendations are intended to inform decision makers and other stakeholders about the Project's potential air quality impacts as BLM develops its Record of Decision. Importantly, Wyoming Department of Environmental Quality (DEQ) has an EPA approved CAA permit program in their SIP and implements the State's Permitting Programs to proactively manage this airshed to protect Wyoming citizens.

We appreciate the opportunity to review the Final EIS. If further explanation of our comments would be helpful as you finalize the Record of Decision, please contact me at (303) 312-6704, or your staff may contact Melanie Wasco of my staff at (303) 312-6540 or wasco.melanie@epa.gov.

Sincerely,



Philip S. Strobel
Director, NEPA Compliance and Review Program
Office of Ecosystems Protection and Remediation

cc: Kevin Christensen, BLM
High Plains District Office Manager

Lonny Bagley, BLM
Casper Field Office Manager

Nancy Vehr, Wyoming Department of Environmental Quality
Air Quality Division Administrator

EPA's Detailed Comments on the Converse County Final EIS

The air quality assessment in the Final EIS predicts exceedances of the human health-based NAAQS for 1-hour Nitrogen Dioxide (NO₂), 24-hour Particulate Matter with diameters of 2.5 microns and smaller (PM_{2.5}), and 24-hour Particulate Matter with diameters of 10 microns and smaller (PM₁₀). The assessment also predicts adverse impacts to nitrogen deposition at several Class I areas. Our review identified two remaining concerns with the air quality impact assessment regarding the modeling approach and the presentation of model results.

Key sections of the Final EIS (i.e., Chapter 4 and Appendix A) inaccurately present and apply EPA's analytical methods for comparing the air quality model results to the NAAQS for some pollutants and model scenarios (see p. 4.1-7, 4.1-10, 4.1-15). These sections state that the model results were processed in accordance with the form of the NAAQS. However, some of the model results relied upon for disclosing impacts and supporting management actions were based on an alternative approach that did not align with EPA's methods. The alternative approach averaged a subset of model results from different model years and scenarios to disclose predicted impacts in these cases. For example, this alternative approach averaged model results from one year of construction, one year of completion, and one year of production for some pollutants. Appendix A of the Final EIS states that this approach attempted to account for the expectation that the various activities will span over a 3-year period (see Appendix A, p. 3-78). This approach also attempted to represent the temporal nature of the activities (see Appendix A, p. 3-78). While these activities may not operate for extended periods of time, this alternative approach does not account for instances when these activities could occur during the same year (i.e., in a single model scenario). Further, this approach does not preserve the statistical form of the standards for comparing model results to the NAAQS.

To be consistent with EPA's *Guideline on Air Quality Models* and additional guidance,^{1,2,3} all of the model results disclosed in Chapter 4 should have been based on potential maximum operating conditions and preserved the form of the NAAQS. The relevance of those predicted impacts could then be assessed in context of the duration of the activity and any other factors that may influence air quality. Specifically, the assessment included in Chapter 4 should have disclosed model results that assumed a single emission profile representative of maximum operating conditions that remained constant for all model years. The analytical approach used to process the model results for comparison to the NAAQS should have also been based on an average across all the years modeled, while maintaining the form of the standards to align with EPA's methods. Doing so would capture a statistical representation of potential maximum impacts over a range of meteorological conditions. This approach would also account for the uncertainty at the project planning stage regarding how long each activity will take and how the field will be developed over the life of the project. Given that the future meteorological conditions may vary from the meteorological data used in the model, this approach would also assist in interpreting the model results because the variables represented by meteorology and emissions profiles are changed independently. This allows an understanding of the air quality impacts of the individual or combined operations without the meteorological conditions influencing the interpretation of the results. For this project, the predicted air quality impacts using this approach for specific pollutants are higher

¹ 40 CFR Part 51, Appendix W to Part 51 - Guideline on Air Quality Models (January 2017)

² Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO₂ National Ambient Air Quality Standard (March 1, 2011)

³ Modeling Procedures for Demonstrating Compliance with PM_{2.5} NAAQS (March 23, 2010)

than those reported in Chapter 4 and used for management actions, where the impacts would further exceed the 1-hour NO₂, 24-hour PM_{2.5}, and 24-hour PM₁₀ NAAQS.

Importantly, both EPA's standard approach and the alternative approach predicted exceedances of the NAAQS for the Converse County Project under various scenarios. For example, Table 4.1-5 of Chapter 4 reports the highest 1-hour NO₂ predicted impacts as being 264.5 µg/m³ using the alternative approach (i.e. sequential construction, completion, and production on four 16-well pads). Table 2-3 of Attachment D reports the predicted 1-hour NO₂ impacts for *completion* activities on four 16-well pads to be 532.49 µg/m³ and these results align with EPA's methods. This means that the highest 1-hour NO₂ predicted impacts of all modeled scenarios are expected during the completion phase of development and those levels could be exceeding the NAAQS by about a factor of 3 instead of 1.5 as reported in Table 4.1-5.

Because air quality exceeding the NAAQS is expected to have health impacts for those breathing that air, we recommend considering management actions to avoid such effects. The model results presented in Attachment D suggest that management actions to reduce emissions would most effectively be focused on the completion engines. We do want to recognize the operator's commitment to reduce NO_x emissions from compressor stations and gas plants to reduce nitrogen deposition impacts, though these reductions will not address the elevated short-term NO₂ and particulate matter (i.e., PM_{2.5} and PM₁₀) concentrations. To address the NAAQS exceedances, we continue to recommend that the applicant committed measures include consideration of Tier 4 fracturing pump engine technology, turbine generation or grid powered electric fracturing fleets, and NO_x and PM reduction technology available for retrofit on Tier 2 equipment. We also recommend considering setbacks from occupied structures and concentrated use areas based on the modeling results in Attachment D to the Air Quality Technical Support Document (i.e., Appendix A). These measures would reduce the elevated NO₂ and PM concentrations and would have co-benefits for reducing the deposition impacts predicted in the air quality assessment.

Finally, we encourage collaboration with private landowners, state and other federal agencies to implement the recommendations and mitigation measures (e.g., new water well setbacks) outlined in the Final EIS to protect environmental resources on federal surface acres and to the extent possible on private surface acres. Because water and other natural resources cross ownership boundaries, these measures could help to protect federally-managed lands and resources.