



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

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**JUN 29 2015**

Ref: 8EPR-N

Duane Spencer, Manager,  
BLM Buffalo Field Office  
1425 Fort Street  
Buffalo, WY 82834

Re: Proposed Resource Management Plan and Final Environmental Impact Statement for the Buffalo Field Office Planning Area CEQ # 20150139

Dear Field Office Manager Spencer:

The U.S. Environmental Protection Agency Region 8 appreciates the opportunity to review the Bureau of Land Management's (BLM's) Buffalo Field Office Proposed Resource Management Plan and Final Environmental Impact Statement (Proposed RMP and Final EIS May 2015). 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 Proposed RMP and Final EIS.

The EPA appreciates BLM's efforts to incorporate our recommendations made on the Draft and through our role as a Cooperating Agency. Those comments and our discussions covered specific environmental resource vulnerabilities, including air quality, water and aquatic resources and the associated environmental impact mitigations for those resources.

As you know, in September of 2013, the EPA rated the Draft RMP and EIS as "3-Unsatisfactory." This rating was primarily due to a lack of information in those draft documents on the current status of air and water resources, monitoring procedures, gaps in impact analyses and lack of presentation of viable alternatives. The EPA appreciates the level of effort your staff and Office put forth to address key areas of concern and this Proposed RMP and Final EIS now include substantial additional information that successfully resolves the previous rating. These improvements include commitments for providing emissions information, a strategy to complete updates to critical air quality models, improved information to inform decision makers and the public regarding the status of natural resources in the Planning Area, and revised RMP requirements that will help protect surface water, groundwater, drinking water, and aquatic resources (e.g. watersheds, riparian areas, wetland areas and aquifers).

The final documents also provide an improved information sharing and decision making structure to guide the responsible development of energy resources that protect communities, public health, and environmental resources. The documents will help other important stakeholders, such as the general

public, agricultural and recreation sectors, understand the adaptive management practices BLM uses to protect both currently healthy and already impaired resources.

The EPA also appreciates that BLM enhanced the information related to climate change affects, acknowledging the challenges regional climate change presents for natural resource management and protection, committing to reduction of greenhouse gas emissions through best management practices in the RMP, and referencing the current Council on Environmental Quality's December 2014 Revised Draft Guidance for Federal Agencies' Consideration of GHG Emissions and Climate Change.

The EPA has additional concerns regarding air and water resource protection. These remaining comments are all within the scope of concerns as they pertain to the NEPA analysis and protection of natural resources.

### **Specific Acknowledgements of Document Improvements**

#### *Surface Water Resources*

The Surface Water Resources section of the Proposed RMP and Final EIS now includes important information and a commitment to work with the WY DEQ and others (e.g. U.S. Geological Survey) to continue to include updated information necessary to characterize the current level of water quality impairment (e.g. Wyoming's most recent Water Quality Assessment and Impaired Waters List (2012 Integrated Clean Water Act §§ 305(b) and 303(d) Report)). This helps to analyze the impacts of any site specific or resource area wide proposed action, and support decisions regarding mitigation of impacts. This is important because the *Wyoming Integrated Report* indicates there are many impaired waters in the planning area, and additional water bodies have become impaired since oil and gas development commenced in the area. It identifies oil and gas development as a source of impairment for some of these water bodies. We also appreciate that BLM agreed to include and consider data from post-2003 water quality monitoring activities in its land use management decision making to monitor and regulate land development activities.

The EPA appreciates that BLM included, as part of a Water Management Plan for proposed oil and gas development projects in *Appendix W – Buffalo Water Resources Management Plan*, requirements for submittal of mitigation measures by project proponents that identify how surface and ground water resources will be protected and restored if affected.

The final documents include added information on how the Buffalo Field Office RMP amendment relates to the earlier Powder River Basin RMP and FEIS. The document now identifies produced water management existing conditions and trends, and a comparison of electrical conductivity and sodium adsorption ratio (EC/SAR) water quality data collected since the Powder River Basin EIS. The final *Appendix W – Buffalo Water Resources Management Plan* also states how BLM's current regulations and site specific measures are implemented when a specific energy development project is identified, is better defined and may need to mitigate impacts related to EC/SAR and other surface water impacts.

## *Ground Water Resources*

The BLM included significant information in the Proposed RMP and Final EIS on the groundwater aquifers in the planning management area and the interconnections between the development target formations and these aquifers. EPA also appreciates that BLM included language in *Appendix V. Oil and Gas Operations* of the Final EIS that incorporates the Safe Drinking Water Act definition of existing and potential groundwater that is to be protected during resource development. Furthermore, the well construction, aquifer protection methods and spill mitigation activities were positive improvements in the documents.

## *Incorporation of New Information*

The EPA appreciates BLM's inclusion in *Appendix V. Oil and Gas Operations*, language that addresses incorporation of new rules and regulations, such as the recently passed, but not yet in effect, Wyoming Oil and Gas Conservation Commission setbacks from existing structures rules for oil and gas development and operations. These proposed rules will make it more clear what location standards for wellheads and pads the State of Wyoming requires. Other examples include new rule making and studies that are directly related to oil and gas development that will occur in the Buffalo Resource Planning Area, such as BLM's new rules, currently stayed by a court decision, supporting safe, responsible resource extraction activities on public lands ([http://www.blm.gov/wo/st/en/info/newsroom/2015/march/nr\\_03\\_20\\_2015.html](http://www.blm.gov/wo/st/en/info/newsroom/2015/march/nr_03_20_2015.html)), and EPA's new draft study on oil and gas hydraulic fracking potential impacts on drinking water resources (<http://www2.epa.gov/hfstudy>) which highlights the absence of specific data sufficient to assess impacts to ground water. The EPA thinks new information like this helps each federal agency work cooperatively to address cumulative impacts with updated management action and mitigation approaches. As the EPA identifies updated information that may help the Bureau update its water resource protection approaches, including management actions, requirements and/or best management practices for the area, we would like to continue to work cooperatively and coordinate directly with your Office on future possible updates to the RMP, as well as EA and EIS level activities.

## **Areas Where EPA Continues to Have Environmental Concerns in the Proposed RMP and Final EIS**

### *Surface and Ground Water Impacts*

The Final EIS cites the 2012 *Wyoming Integrated Report* and identifies two segments of the Powder River totaling approximately 120 miles long and a segment of Salt Creek approximately 45 miles long running through the planning area that have impaired water quality due to petroleum production sources. The EPA appreciates that the BLM included this information in the Proposed RMP and Final EIS and committed to work with the WY DEQ to provide continuous updates as they become available. It will be important that the oil and gas management decisions made under this Proposed RMP and Final EIS do not exacerbate impairments, and include protections and mitigation that correct water quality impairments.

The Proposed RMP and Final EIS commits to using information from the *Wyoming Integrated Report*, data from the BLM's post-2003 water quality monitoring activities, and new data as it is made available,

as a baseline for the analysis of surface water cumulative impacts from future activities. The EPA agrees with this approach for water and land resource protection. The BLM plans to use a combination of stipulations and Best Management Practices to protect water quality until such time as that information is obtained and integrated into future RMP amendments as needed. We look forward to working with your Office and staff to obtain, analyze and incorporate baseline data into future NEPA documents.

The EPA remains concerned that the potential ground water impacts analysis in the Proposed RMP and Final EIS does not describe the current and future risks to ground water within the resource management area in enough detail.

#### *Mitigation to Avoid Water Resource Impacts*

The BLM added useful language to *Appendix W – Buffalo Water Resources Management Plan* of the Proposed RMP and Final EIS that clarifies how and when BLM will pursue actions with developers if water monitoring data identifies water quality standards are exceeded or being threatened (i.e. “trigger” levels). *Appendix W- Buffalo Water Resources Management Plan* also clarifies the requirements and design features that protect water resources. The EPA recognizes that any of the management action requirements in the Proposed RMP, including additional mitigation that is supported by project specific NEPA analysis, can be required as conditions of approval.

The EPA appreciates the references to and clarification BLM provided on management actions included throughout many appendices in the Proposed RMP and Final EIS. Although there are management actions pertaining to water contained in several appendices, it would be more effective to link these different decisions together in *Appendix W – Buffalo Water Resources Management Plan*. The EPA recommends management actions that refer to water, such as water management actions in *Appendix H – Fluid Mineral Lease Notices*, *Appendix I – Biological Assessment* and *Appendix V. Oil and Gas Operations*, be cross-referenced in *Appendix W – Buffalo Water Resources Management Plan*. Doing so will help disclose and assure how management actions in one section support resource management protection goals in other sections and further demonstrate how BLM’s management actions complement each other for effective resource impact prevention and mitigation.

The proposed RMP and Final EIS includes Controlled Surface Use (CSU) stipulations in *Appendix H – Fluid Mineral Lease Notices* which restricts surface disturbance within 500 feet of springs, non-CBNG reservoirs, water wells, or perennial streams and associated riparian and wetlands habitat in Management Actions (1014 - Water and 4009 - Riparian). While these setbacks are in other Appendices than *Appendix W – Buffalo Water Resources Management Plan*, users of the RMP and Final EIS documents will go to *Appendix W – Buffalo Water Resources Management Plan* to better understand prescribed protections for water resources. In addition, it is not clear if the protections in *Appendix I – Biological Assessment*, for 500 foot setbacks, are only for water bodies with endangered or otherwise protected species, or for all waters in the management area. EPA understands that the Proposed RMP and Final EIS did include management actions that would be applicable to leases in *Appendix W – Buffalo Water Resources Management Plan* and that do address the topic of water. We understand, based upon communication with BLM during cooperative agency communications and through reviewing the Proposed RMP and Final EIS, that management actions to protect surface and ground water will be implemented on a case-by-case basis during site specific NEPA and project approvals. To achieve the broad goals in some management actions, for example, “Manage surface-disturbing

activities to prevent degradation of water quality for all waters, and (1004 - Water) and Minimize impacts to groundwater quality and quantity during BLM-authorized actions (1005 - Water)”, we recommend that references in the final RMP be more clearly stated as applicable and specifically protective of resources vulnerable to development and applied at the specific project action level under the Proposed RMP for all waters in the management area.

The Proposed RMP and Final EIS did not include any lease stipulations in *Appendix W – Buffalo Water Resources Management Plan*, or *Appendix J – Mitigation Guidelines for Surface-Disturbing and Disruptive Activities, Wyoming Bureau of Land Management* that correspond to the protections these management actions (1004 and 1005) address. Building on discussions during the cooperating agency dialogue related to requiring instead of recommending protective measures, the EPA recommends that the final RMP contain stipulations, lease notices, or other assurances that assure consistent implementation of these resource protection measures for future development in the planning area. Specifically, because of the risks associated with the types of pits and ponds in *Appendix V – Surface Disturbances (V.4.3)* we urge the BLM to include a management action that requires avoidance of these activities in sensitive water resource areas. Pits and ponds present a risk of leaks or spills which may impact surface and/or groundwater resources, as well as potential air quality and wildlife impacts. We recommend that pits and ponds be avoided whenever possible, with an option for routine use and mitigation applied only to those activities that are unavoidable.

The Proposed RMP and Final EIS include a water resource CSU stipulation that would require an operator to prepare a site-specific plan demonstrating to the authorized officer how they would meet certain performance standards for reserve pits, drill pad sites, and drilling programs. Approval of the plan would be required prior to initiating surface disturbance in the identified locations near public water supply wells and intakes. The EPA is concerned that, because oil and gas infrastructure would be allowed in close proximity to sensitive drinking water resources, the proposed CSU stipulation does not adequately achieve the intent of the management action to “avoid activities that could negatively affect water resources” within these sensitive areas. Even with careful design, risks to water resources from spills and uncontrolled releases exist. For this reason, the EPA continues to support the use of No Surface Occupancy buffers as a more effective and reliable way to protect sensitive water resource areas. Such buffers reduce the likelihood or magnitude of impacts from spills and uncontrolled releases from drilling infrastructure by providing an opportunity for spill attenuation or intervention to contain and remediate releases before they can reach sensitive water resources. They also reduce potential for inundation of infrastructure during flood events, and reduce the likelihood of costly impacts to drinking water treatment systems. If the BLM chooses to continue with use of CSU to implement management action 1042, we recommend that pits and ponds not be permitted in sensitive areas that provide public drinking water supply and that other infrastructure be set back a minimum of 500 feet to reduce the potential for accidental leaks or spills to impact drinking water supplies.

### *Green House Gas Emissions and Climate Change Impacts*

As stated, EPA appreciates the helpful information added on Climate Change Impacts in Chapter 3 of the Final EIS related to 2014 Council on Environmental Quality’s December 2014 Revised Draft Guidance for Federal Agencies’ Consideration of GHG Emissions and Climate Change which the EPA thinks provides a reasonable approach for considering these impacts. The Proposed RMP does include the calculated emissions for the proposed action and the Alternatives. We note that the Buffalo Final EIS

compares the project related emissions to both Wyoming Statewide GHG emissions inventory and the total U.S. 2008 GHG emissions. As discussed briefly during cooperative agency interactions, We believe a comparison of planning area emissions to state and global emissions does not provide meaningful information for a planning level analysis. We recommend that the NEPA analyses provide a frame of reference, such as an applicable Federal, state, tribal or local goal for GHG emission reductions, and discuss whether the emissions levels are consistent with such goals. The Final EIS also makes the following statement, "Assessing the impacts of GHG emissions on global climate change requires modeling on a global scale which is beyond the scope of this analysis." While the Final EIS notes that "potential impacts on climate change are influenced by GHG emission sources from around the globe and it is not possible to distinguish the impacts to global climate change from GHG emissions originating from the planning area", we recommend agencies follow the approach recommended in the CEQ guidance of using the projected GHG emissions as proxy for assessing a proposed action's potential climate change impacts. This allows the Bureau to present the environmental impacts in clear terms and with sufficient information to make a reasoned choice between the no-action and alternatives and mitigation.

We also recommend that the BLM's Record of Decision further identify and commit to implementation of specific strategies for reasonable mitigation measures at the project level that specifically reduce GHG emissions (which could include a discussion of co-benefits of actions to reduce other pollutants). Such measures could include consideration of renewable energy resources to address energy needs for facilities.

### **Conclusion**

The EPA looks forward to continuing to work with the BLM as you begin planning actions under the new RMP. Please feel free to contact me at (303) 312-6162, or Nat Miullo, at 303-312-6233, if you have any questions or would like to discuss the effort further.

Sincerely,



Philip S. Strobel  
Director, NEPA Compliance and Review Program