

Phoonswadi-Brewer, Sean

From: NPL_AR
Subject: EPA's Scoping Comments on the NPL Project and Draft EIS
Attachments: EPA Scoping Comments on NPL 5.20.2011.pdf

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05/20/2011 02:02 PM

"Kellie.Roadifer@blm.gov"
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To

CC

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Subject

EPA's Scoping Comments on the NPL
 Project and Draft EIS

Hi Kellie,

I've attached a copy of our scoping comments on the NPL project and Draft EIS. If you have any questions about our comments, please don't hesitate to call me. We look forward to working with you on this project as it proceeds.

Joyel

(See attached file: EPA Scoping Comments on NPL 5.20.2011.pdf)

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 Joyel Dhieux, Environmental Engineer
 NEPA Compliance and Review (EPR-N)
 U.S. Environmental Protection Agency Region 8
 1595 Wynkoop Street
 Denver, Colorado 80202
 Phone: 303-312-6647(See attached file: EPA Scoping Comments on NPL
 5.20.2011.pdf)



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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Ref: EPR-N

MAY 20 2011

Ms. Kellie Roadifer
Bureau of Land Management
Pinedale Field Office
P.O. Box 768
Pinedale, Wyoming 82941

Re: Scoping Comments for the Normally
Pressurized Lance Natural Gas Development
Project and Draft EIS, Sublette County,
Wyoming

Dear Ms. Roadifer:

The U.S. Environmental Protection Agency (EPA) Region 8 has reviewed the Bureau of Land Management's (BLM) Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) for the proposed Normally Pressurized Lance (NPL) Natural Gas Development Project in Sublette County, Wyoming. In accordance with EPA's 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, we are providing scoping comments to inform BLM of issues that EPA believes to be significant and warrant explicit treatment during the NEPA process. In providing these comments, it is our goal to have these issues addressed in the Draft EIS.

Project Description

The NPL project area encompasses 141,080 acres located immediately south and west of the existing Jonah Infill Natural Gas Field in Sublette County, Wyoming. Encana Oil and Gas Inc. (Encana) proposes to drill and develop up to 3,500 wells ranging in depth from 6,500 feet to 13,500 feet. The proposed project incorporates several significant mitigation measures to reduce impacts to air quality, water quality and land (described below in applicable sections of this scoping letter).

Key Issues Identified by EPA

Based on our current understanding of the proposed project and the area, EPA has identified two key issues that we believe must be clearly addressed and analyzed in the Draft EIS so that potential impacts to public health and the environment can be fully evaluated and disclosed: (1) impacts on air quality; and (2) protection of groundwater and surface water resources. These

issues, as well as EPA's general recommendations on how they might be addressed are described in more detail below.

Additional comments on other important environmental concerns which EPA recommends BLM address are discussed in the enclosed, "Detailed Comments". They include:

- Wetlands, Streams and Riparian Habitat
- Erosion and Aquatic Habitat Impacts
- Spill Prevention
- Dust Suppression from Unpaved Roads and Disturbed Areas
- Greenhouse Gas Emissions
- Cumulative Impacts Within and Beyond Project Boundaries

(1) Air quality impacts represent a critical concern that must be evaluated in the Draft EIS, with mitigation options considered and analyzed.

With expanding energy development across the west, air quality has become an increasingly important issue. Given recent air quality trends in the Sublette County area, air quality will be a particularly significant issue for the NPL project. Not only is the proposed NPL project to be located entirely within the boundaries of the Wyoming Department of Environmental Quality's (Wyoming DEQ) proposed non-attainment area for the ozone National Ambient Air Quality Standard (NAAQS), it also would be located approximately 20 to 25 miles west of the Class I Bridger Wilderness Area. Under the Clean Air Act such areas enjoy special protection of air quality and air quality related values, such as visibility protection.

The NPL's scoping notice appears to reflect a recognition by the project proponent, Encana, of the importance of air quality in the project area. EPA commends Encana for the approach taken in the NPL to incorporate several important and effective air quality mitigation measures. These measures include using:

- natural gas drill rigs,
- multi-phase gathering systems, and
- flareless well completion practices.

EPA understands that Encana has also proposed additional air quality mitigation to further reduce emissions. EPA looks forward to evaluating these during the EIS process.

In view of the serious air quality concerns in the project area, the NEPA analysis for this project will need to carefully and thoroughly evaluate the proposed project's potential impact on air quality. To this end, EPA recommends that the Draft EIS disclose and analyze the project's direct, indirect, and cumulative impacts on:

- All criteria pollutants under the NAAQS, including ozone.
- Prevention of Significant Deterioration (PSD) increments.
- Ambient concentrations of hazardous air pollutants (e.g. formaldehyde, benzene, toluene, ethyl benzene, xylene, n-hexane); and
- Air quality-related values (AQRV) in Class I areas (e.g., visibility, deposition).

Furthermore and depending on the schedule for this project, a General Conformity applicability analysis and determination may also be necessary. Such analysis would be required pursuant EPA policy and the General Conformity Rule (40 CFR 93, Subpart B), which applies one year after the effective date that EPA formally designates an area as nonattainment. EPA recommends BLM create an inter-agency air quality workgroup to discuss and develop an agreed upon approach to the air quality analysis, as has been done in conjunction with other energy development projects located in sensitive areas.

- (2) Groundwater and surface water resources are of significant importance, rendering it necessary to fully analyze the resources, potential impacts and associated mitigation measures.

EPA considers the protection of groundwater, drinking water supply and quality, and stock and irrigation water supply and quality to be among the most critical issues of any NEPA analysis in areas with the potential for oil and gas development. To this end, EPA recommends that BLM pay particular attention to ensuring a robust treatment of this issue in the NEPA analysis.

Oil and gas activities, including construction, drilling, well stimulation, pipelines, produced fluid storage, reinjection of produced water, and transport provide opportunities for the introduction of contamination into the groundwater including petroleum compounds (e.g., benzene, toluene, xylene, etc.) and other hazardous chemicals. EPA recommends the Draft EIS characterize water resources, analyze potential impacts to, and identify appropriate mitigation and monitoring measures to protect groundwater, drinking water, stock and irrigation waters.

Given EPA's concerns regarding water quality in and around the project area, we recommend that BLM fully evaluate water resource impacts associated with the project by including the following in the NEPA analysis:

- A thorough characterization of existing groundwater and surface water resources within the project area, including:
 - Maps of groundwater and surface water resources in the area to be developed.
 - Baseline data on the condition and quality of groundwater and surface water resources. EPA recommends this evaluation include any evidence of hydrocarbon impacts. If hydrocarbon impacts are found, a full suite of analytical information must be collected to evaluate the sources (anthropogenic or natural), volume and areas of impact.
 - Information on the quality, quantity and location of all groundwater aquifers, recharge zones, any laterally extensive confining units or the lack thereof, and zones of fracturing or faulting that extend to a depth that could allow migration of fluids or gas during well construction or hydraulic fracturing.
 - An identification and description of all waters of the U.S. that could be affected by the project alternatives; and where applicable, acreages and channel lengths, habitat types, values, and functions of these waters.
- Disclosure of which waters may be impacted, the nature of potential impacts, and specific pollutants likely to impact those waters.

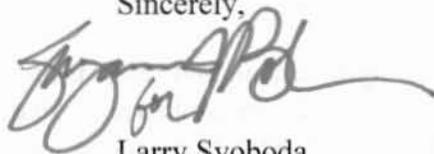
- Identification of all source water protection areas within each alternative.
- Surface water and groundwater use, including the location and source identification of agricultural, domestic and public water supply wells or intakes
- Analysis of potential impacts to water sources from all phases of the oil and gas development and operations.
- Analysis of the management of the fracturing fluids, including the toxicity and fate of these fluids, with a focus on avoiding surface spills or leaks of these fluids from the reserve pits. Some hydraulic fracturing compounds contain materials that could be harmful if released. It is critical the Draft EIS disclose what fluids will be used for hydraulic fracturing purposes in order to determine what other compounds need to be monitored to determine if there are impacts to important water aquifers from the stimulation process. If hydraulic fracturing fluids will include diesel, the stimulation process will need prior approval under the Safe Drinking Water Act. In addition to disclosing the anticipated fluids to be used for the hydraulic fracturing, EPA recommends the Draft EIS also provide an estimation of flow-back volumes to assure the proposed project has appropriately estimated water management needs.

Proper well design and construction are crucial to protecting groundwater resources. EPA recommends the Draft EIS specify how groundwater will be protected with the proposed well design and casing. Among other things, this analysis must include: casing design and cementing requirements, pit liner requirements, review of existing wells for inadequate casing, and cementing related to new production zones. In addition, it is important that the NEPA analysis identify all relevant and reasonable mitigation measures to protect important water resources, even if they are outside of the jurisdiction of the BLM. Mitigation measures (e.g., backflow preventers, adequate cementing and casing, pit lining) must be developed and implemented for this project to protect surface and ground water zones.

A groundwater monitoring program is essential to ensure groundwater resources are adequately protected and well design and mitigation measures are effective. To this end, EPA recommends that the Draft EIS include a comprehensive and detailed groundwater monitoring and mitigation plan for all aquifers that may be potentially impacted by the proposed operations. It is important that the monitoring program track any groundwater impacts as drilling and production operations occur. EPA also recommends the Draft EIS specify how any contamination of groundwater or surface water will be remediated and how water well owners will be compensated if contamination occurs. As a cooperating agency, EPA is committed to working with the BLM and Wyoming DEQ towards developing a groundwater analysis, monitoring and mitigation plan for this project.

Thank you for the opportunity to participate in the scoping process for the NPL EIS. As a formal cooperating agency with BLM on this EIS, EPA hopes to work closely with BLM on preparation of the EIS and to assist with the development of an analysis which will adequately address potential environmental impacts and identify appropriate mitigation measures. If you have any questions about our comments, please contact me at 303-312-6004, or you may contact Joyel Dhieux of my staff at 303-312-6647.

Sincerely,

A handwritten signature in black ink, appearing to read "Larry Svoboda", with a long horizontal flourish extending to the right.

Larry Svoboda
Director, NEPA Compliance and Review Program
Office of Ecosystems Protection and Remediation

Enclosure

**Detailed Scoping Comments by the U.S. Environmental Protection Agency for the
Normally Pressurized Lance (NPL) Natural Gas Development Project
Environmental Impact Statement (Draft EIS)
Pinedale, Wyoming**

Wetlands, Streams and Riparian Habitat

EPA considers the protection, improvement, and restoration of wetlands and riparian areas to be a high priority. Wetlands increase landscape and species diversity, and are critical to the protection of designated water uses. Possible impacts on wetlands include damage or improvement to: water quality; habitat for aquatic and terrestrial life; channel and bank stability; flood storage; groundwater recharge and discharge; sources of primary production; and recreation and aesthetics. Road and pipeline construction, land clearing, and earthwork generally include sedimentation and hydraulic impacts which at some level may cause changes to surface and subsurface drainage patterns and, ultimately, wetland integrity and function. Riparian habitats, similar to wetlands, are important ecological areas supporting many species of western wildlife. Riparian areas generally lack the amount or duration of water usually present in wetlands, yet are “wetter” than adjacent uplands. Riparian areas increase landscape and species diversity, and are often critical to the protection of water quality and beneficial uses.

EPA recommends that in order to provide the highest level of protection to wetlands, the Draft EIS disclose potential impacts and analyze methods for restricting actions on certain lands and developing and enforcing best management practices (BMPs) to protect of these valuable aquatic resources. More specifically, EPA suggests the Draft EIS:

- Identify specific mitigation requirements and BMPs applicable to the operator for all phases and actions involved in drilling and production.
- Offer a detailed inventory and mapping of wetland resources within the area being proposed for drilling, including both wetlands that are regulated under Section 404 of the Clean Water Act and wetlands that are determined to be non-jurisdictional and protected under Executive Order (EO) 11990 – Protection of Wetlands (May 24, 1977). EO 11990 applies to all wetlands located on Federal lands. It directs all Federal Agencies to provide leadership and take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands.
- Include assurances that there be a complete avoidance of disturbance to any fen wetland (a Category I resource).

Furthermore as the project proceeds, EPA encourages the BLM to require delineation and marking of perennial seeps, springs and wetlands on maps and on the ground before development so the project will avoid impacts to them. We also recommend establishment of wetland and riparian habitat 100-foot buffer zones to avoid adverse impacts to streams, wetlands, and riparian areas.

Erosion and Aquatic Habitat Impacts

EPA recommends the Draft EIS disclose the extent to which aquatic habitat could be impaired by potential activities, including effects on surface and subsurface water quality and quantity, aquatic biota, stream structure and channel stability, streambed substrate, including season and spawning habitats, stream bank vegetation, and riparian habitats. It is important particular attention be directed at evaluating and disclosing the cumulative effects of increased levels of erosion and sedimentation. Water quality parameters such as conductivity, dissolved and suspended solids, metals, pH, temperature, dissolved oxygen and physical aquatic habitat parameters may also be important monitoring indicators for determining stream or lake impairment or stress, as well as its sensitivity to further impacts. The EPA recommends existing water quality standards applicable to the affected waterbodies be presented to provide a basis for determining whether existing uses will be protected and water quality standards met.

Spill Prevention

Recent events have led EPA to become acutely aware of the spill risks inherent in oil and gas development operations. To this end, it is important the NEPA analysis address reasonably foreseeable impacts from low probability catastrophic spills, and spill prevention measures that are in place to prevent these impacts. Implementation of a Spill Prevention, Control, and Countermeasures Plan (SPCCP) will reduce the potential for direct and indirect impacts to sensitive resources from spills or accidental releases of hazardous substances. EPA believes that it is critical that all SPCCPs are appropriately designed given local geology and the level of risk associated with local conditions. We recommend that BLM describe in the Draft EIS how a site-specific SPCCP will address low probability catastrophic spills.

Dust Suppression from Unpaved Roads and Disturbed Areas

Dust particulates from construction, vehicle travel on unpaved roads, and ongoing operations are an important concern. The airborne dust may not only be a visual nuisance, but can potentially be dangerous to asthma sufferers. Sedimentation from storm water run-off can also severely impact the aquatic environment. EPA recommends the Draft EIS include detailed plans for addressing dust control for the project. We suggest the plan include, but is not limited to: dust suppression methods, inspection schedules, and documentation and accountability processes.

Greenhouse Gas Emissions

Climate change and greenhouse gas (GHG) emissions remain a key required component of NEPA analyses. Pursuant to Council on Environmental Quality (CEQ) guidance and Executive Order 13514 and given that oil and natural gas systems are the biggest contributor to methane emissions in the U.S, EPA recommends the Draft EIS include an analysis and disclosure of greenhouse gas emissions and climate change. For the NEPA analysis, we suggest a four-step approach:

1. Quantify and disclose projected annual and total project lifetime cumulative GHG emissions in CO₂-equivalent terms and translate the emissions into equivalencies that are easily understood from the public standpoint (e.g., annual GHG emissions from x number of motor vehicles, see <https://www.epa.gov/RDEE/energy-resources/calculator.html>). In addition, because information on the “downstream” indirect GHG emissions from activities such as refining may be of interest to the public in obtaining a complete picture of the GHG emissions associated with the proposed project, it may be helpful to estimate and disclose them. Please describe any potential inconsistencies between the proposed action and any relevant Regional, Tribal or State climate change plans or goals, as well as the extent to which BLM would reconcile, through mitigation or otherwise, its proposed action with such plans.
2. Qualitatively discuss the link between GHGs and climate change, and the potential impacts of climate change. As discussed in the 2010 CEQ Draft Guidance, the estimated level of GHG emissions from the project and its alternatives can also serve as a reasonable proxy for assessing potential climate change impacts, and provide decision makers and the public with useful information for a reasoned choice among alternatives.
3. Include a summary discussion of ongoing and projected regional climate change impacts relevant to the action area based on U.S. Global Change Research Program assessments. EPA also recommends that the EIS identify any potential need to adapt the proposed action to these effects, as well as any potential impacts from the proposed action that may be exacerbated by climate change (e.g. Would reclamation become more difficult with climate change? Will there be increased impacts to water resources from the project’s water consumption?).
4. Analyze reasonable alternatives and/or potential means to mitigate project-related GHG emissions. We recommend the Draft EIS include analysis of appropriate mitigation measures (e.g. mitigation measures from the GasStar Program).

Cumulative Impacts Within and Beyond Project Boundaries

In addition to the evaluation and discussion of direct and indirect impacts, EPA recommends the Draft EIS provide cumulative impact analyses for resources of concern. It is important the Draft EIS analyze impacts within and beyond the project boundaries using airsheds and watersheds, rather than political boundaries to define the scope of this analysis. EPA strongly recommends that the assessment include the cumulative impact of reasonably foreseeable energy development, energy-related activities and other activities that may affect air quality, water quality and other resources of concern in the area (e.g. wildlife). The purpose of this essential analysis is to assess the incremental impacts on each resource of concern due to connected and unconnected actions that take place in a geographic area over time (i.e., past, present and future) no matter which entity (public or private) undertakes the actions. Cumulative impact analysis aids in identifying the level of significance of those impacts on a particular resource and the appropriate type and level of mitigation required to offset the current proposal’s contribution to these impacts.

