



County of Santa Barbara

Planning and Development

Dianne M. Black, Director
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September 7, 2018

Attn: Bakersfield RMP Hydraulic Fracturing Analysis
Bakersfield Field Office
Bureau of Land Management
3801 Pegasus Drive
Bakersfield, CA 93008

Re: Scoping Comments for the Bakersfield RMP Hydraulic Fracturing Analysis Project

The Santa Barbara County Planning and Development Department (P&D) appreciates the opportunity to provide comments regarding the scope of the environmental impacts and concerns that should be addressed in the Draft Supplemental Environmental Impact Statement (EIS) for the Bakersfield RMP Hydraulic Fracturing Analysis Project. Provided below are our comments.

1. Project Scope.

The proposed locations for new oil & gas leasing are generally not within State Designated Oilfields and are unlikely to contain developable oil and gas resources. With the exception of relatively small areas within Vandenberg Airforce Base and Cuyama, very few of the areas identified to be opened for oil & gas leasing are located within State Designated Oilfields. As a result, it is unlikely that any mineral reserves are located in these areas and even less likely that perspective producers would attempt to develop these areas. The EIS should focus the analysis of future oil and gas development to areas that are likely to contain oil & gas resources, rather than all land within the Bakersfield Planning Area owned by the Bureau of Land Management (BLM).

2. Disclosure of Hydraulic Fracturing-Fluid Chemicals.

Some of the chemicals associated with hydraulic fracturing are toxic, including but not limited to diesel, polycyclic aromatic hydrocarbons, methanol, formaldehyde, ethylene glycol, glycol ether, hydrochloric acid, and sodium hydroxide. The industry considers the types and concentration of chemical additives to be confidential trade secrets, which makes precise identification of the chemicals used at a specific well-site difficult. The industry has established a voluntary chemical disclosure registry – fracfocus.org – to help overcome this barrier but not all producers participate in this disclosure. The EIS should clearly identify the chemicals commonly used in the hydraulic fracturing process and any producers who use this technique should be required to notify the public of the fracking chemicals used on BLM lands.

3. Impacts to Groundwater and Surface Quality and Water Resources.

- a. The EIS Must Evaluate Contamination from Toxic Chemicals in Hydraulic Fracturing Fluids:** Hydraulic fracturing creates extremely high pressure below the ground surface to the oil-bearing formations. Potential impacts could occur if there is a failure of the injection well casing and cement sheath resulting in the upward or horizontal migration of the stimulation fluid (processed produced water) into fresh groundwater resources. The EIS should disclose any mobility of natural occurring substances in the subsurface potentially caused by hydraulic fracturing (e.g., methane, metals, and naturally occurring radioactive material). Potential pathways to groundwater may include upward migration through the wellbore if it has not been properly cased and cemented, upward migration through the fractures themselves, upward migration through the disposal reservoir, or downward migration via surface spillage. The impacts of contamination must be thoroughly addressed in the EIS, along with mitigation measures that establish a baseline monitoring system of groundwater sampling before and after drilling and hydraulic fracturing has occurred.
- b. The EIS Must Disclose the Water Use Needed for the Project:** According to County of Santa Barbara records, in 2011 two wells north of Los Alamos using hydraulic fracturing technology used approximately 126,000 gallons of groundwater on one well and 109,000 on the other. For new wells, additional groundwater water would be required during construction and routine operations, including but not limited to dust control, grading, compaction, well drilling, fire protection, lavatories, equipment cleaning, and minor landscape irrigation. The EIS must provide an in-depth analysis of impacts of extracting fresh water from Santa Barbara County's groundwater basins including the cumulative effect on existing users in the basins.
- c. The EIS Must Evaluate the Impacts of Injecting Produced Water into the Aquifer:** Many of the areas identified for oil & gas leasing are located within the boundaries of Santa Barbara County groundwater aquifers including the Cuyama, Santa Maria, San Antonio and Santa Ynez groundwater basins. The EIS must disclose and evaluate: (1) what substances/chemicals will be injected into the aquifer; (2) are any of these substances known carcinogens; (3) in what quantities and how often will the operator inject into the aquifer; and (4) what testing will be done to monitor the wells for contamination from leaks or seeps. Finally, the EIS must fully analyze the potential for groundwater contamination as a result of injecting directly into underground aquifers, particularly given that surrounding communities, residents, businesses, and agricultural operations depend upon clean groundwater resources.
- d. The EIS Must Disclose the Impacts to Surface Water Resulting from Oil Spills:** A rupture or leak from oil production facilities, pipelines or transport trucks has the potential to result in a substantial adverse effect on surface or groundwater quality. Hydraulic fracturing presents potentially significant impacts to surface resources that must be fully addressed in the EIS including the following:

- Failure of oil production wells could release oil or produced water into the groundwater producing zone through horizontal or upward migration, during either drilling or operations.
- Surface spills and leaks at the drilling sites or storage areas can percolate to groundwater, or to a subsurface path along damaged oil well casing, cement seals or natural subsurface pathways such as fractures or faults into the groundwater aquifer.

4. Air Quality and Greenhouse Gas Emissions.

One of the main chemicals used in the hydraulic fracturing process is methane. Because methane is 25 times stronger than carbon dioxide in terms of trapping heat, the release of this gas is detrimental to the air quality of the surrounding area. The EIS must address the climate change impacts, both incremental and cumulative. The EIS should also describe feasible mitigation measures and quantify the exact amount of mitigation that can be achieved.

5. Geologic Impacts.

According to published reports, hydraulic fracturing may increase seismic activity due the high pressure used to extract oil and gas from rock. The EIS must disclose the increased risk of earthquakes from the Project's proposed injections, and its contribution to the cumulative risk of increased seismic activity due to past, present, and foreseeable injections into the underlying geologic formations.

6. Impacts to Biological Resources.

In order to fully disclose the Project's potentially significant impacts on biological resources as required by NEPA, the EIS must address the following:

- **Conduct Protocol-level Surveys for Special-status Plant and Animal Species Prior to release of the EIS:** Protocol-level or "focused" surveys for special-status plant and wildlife species must be done before the EIS is prepared in order to properly define the biological baseline setting for the purposes of environmental review and the EIS's biological impact analysis. Reconnaissance-level surveys are inadequate to establish the biological baseline for the EIS.
- **Biological Surveys Must be Conducted at the Correct Time of the Year:** It is important to conduct wildlife surveys at the correct times during the year (e.g., seasonally or relative to rainfall events) in order to accurately identify target animal and plant species at the times when they are expected to be present.

7. Noise Impacts.

The EIS must disclose the anticipated noise levels from the proposed hydraulic fracturing activities and analyze potential effects on surrounding land uses, particularly any noise-sensitive receptors.

Thank you for the opportunity to provide comments on the scope of the project's impacts and issues to be addressed in the EIS. We look forward to reviewing the public draft document upon its publication.

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Sincerely,



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Cc: John Zorovich, Deputy Director
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