

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

July 19, 2013

Collin Reinhardt
Bureau of Land Management
Bishop Field Office
351 Pacu Lane, Suite 100
Bishop, California 93514

Subject: Final Environmental Impact Statement/Final Environmental Impact Report for the Casa Diablo IV Geothermal Development Project, Mono County, CA (CEQ# 20130191)

Dear Mr. Reinhardt:

The U.S. Environmental Protection Agency has reviewed the above-referenced document pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

The EPA reviewed the Draft Environmental Impact Statement/Draft Environmental Impact Report and provided comments to the Bureau of Land Management on January 30, 2013. We rated the DEIS as *Environmental Concerns – Insufficient Information* (EC-2), primarily due to potential direct and cumulative impacts to sensitive wetland and riparian resources. We requested an estimate of impacts to jurisdictional waters and a discussion of compliance with the Clean Water Act Section 404(b)(1) Guidelines and Mitigation Rule, as appropriate. We also made recommendations regarding the protection of air quality and biological resources, and recommended that a commitment to abide by the latest Avian Power Line Interaction Committee guidelines be included in the FEIS/FEIR.

The EPA continues to support the Project purpose to provide additional renewable energy for California. We appreciate the efforts of the Bureau of Land Management, United States Forest Service, Great Basin Unified Air Pollution Control District, the Applicant, and consultants to respond to our DEIS/DEIR comments, and we commend the Applicant, State, and federal agencies for incorporating additional mitigation measures to support environmentally preferable outcomes. In particular, we are pleased to note that the FEIS/FEIR contains air quality mitigation measures and a commitment to monitor hydrogen sulfide during well drilling and testing. We understand that, based on an assessment of potentially jurisdictional waters, which is pending verification by the U.S. Army Corps of Engineers, no direct impacts to jurisdictional waters are expected.

While recognizing the above improvements, we reiterate our previous recommendation that the FEIS/FEIR consider the children playing at the Shady Rest Park to be sensitive receptors, and evaluate the potential impacts of air emissions during well drilling on them, accordingly. We note that the California Air Resources Board's Air Quality and Land Use Handbook¹ states that land uses where sensitive individuals are most likely to spend time include schools and schoolyards, parks and

¹ California Air Resources Board. 2005. Air Quality and Land Use Handbook: A Community Health Perspective. <<http://www.arb.ca.gov/ch/handbook.pdf>>. Web July 12, 2013.

playgrounds, daycare centers, nursing homes, hospitals, and residential communities. It goes on to state that playgrounds could be play areas associated with parks or community centers. The EPA continues to believe that the Shady Rest Park, a sports complex, meets this definition.

The EPA also reiterates the recommendation that the FEIS include a discussion of pitless or closed loop drilling methods that do not require the construction and management of a reserves pit. The BLM Gold Book, which is typically used for geothermal well drilling guidance, states, in Section 2 on page 17: “to prevent contamination of ground water and soils or to conserve water, it is recommended that operators use a closed-loop drilling system or line reserve pits with an impermeable liner, particularly when it is anticipated that pits will contain moderate or high levels of hydrocarbons and chloride, or the pits are located in areas of shallow groundwater or porous soils over fractured bedrock aquifers.”² In the FEIS/FEIR as written, neither of these methods is required. If closed loop drilling will not be employed for the proposed project, we recommend that the FEIS provide the basis for this decision. In addition, the EPA recommends that, if a reserve pit is used, its design and management comply with the BLM “Gold Book” best management practices.

The EPA has no objections to the proposed project, and we are available to discuss all recommendations provided. Please send one hard copy and one CD ROM copy of the Record of Decision to us when they are filed with our Washington D.C. office. If you have any questions, please contact me at 415-972-3521, or contact Scott Sysum, the lead reviewer for this project. Scott can be reached at 415-972-3742 or sysum.scott@epa.gov.

Sincerely,

/s/

Kathleen Martyn Goforth, Manager
Environmental Review Office (CED-2)

² United States Department of the Interior and United States Department of Agriculture. 2007. Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development. BLM/WO/ST-06/021+3071/REV 07. Bureau of Land Management. Denver, Colorado. 84 pp.
<http://www.blm.gov/pgdata/etc/medialib/blm/wo/MINERALS__REALTY__AND_RESOURCE_PROTECTION_/energy/oil_and_gas.Par.18714.File.dat/OILgas.pdf> Web July 12, 2013.