

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX 75 Hawthorne Street San Francisco, CA 94105-3901

OFFICE OF THE REGIONAL ADMINISTRATOR

Kenneth A. Harris Jr. State Oil and Gas Supervisor Division of Oil, Gas and Geothermal Resources 801 K Street, MS-18-05 Sacramento, CA 95814-3530

Re: Division of Oil, Gas and Geothermal Resources Determination Regarding the Eleven Aquifers Historically Treated as Exempt

Dear Mr. Harris:

The U.S. Environmental Protection Agency Region 9 (EPA) has received your March 7, 2017 determination and accompanying documentation regarding the eleven aquifers historically treated as exempt. Upon review of this submission, the EPA agrees it is appropriate to document this finding in an addendum to the Memorandum of Agreement between our agencies to clarify for the historical record that the California Division of Oil, Gas and Geothermal Resources has determined these eleven aquifers are non-exempt aquifers.

Background

In 1983, the EPA approved California for primary enforcement responsibility (primacy) to implement the Class II Underground Injection Control (UIC) Program under Section 1425 of the federal Safe Drinking Water Act (SDWA). The Class II program is administered in California by the Division of Oil, Gas and Geothermal Resources (DOGGR). When the EPA approved DOGGR's Class II program primacy, a Memorandum of Agreement (MOA) was created to guide the agencies' administration of DOGGR's program and the EPA's oversight role. As a part of its application for the Class II primacy program, DOGGR proposed numerous aquifer exemptions to the EPA for approval. These included exemption requests for hydrocarbon-bearing formations as defined in Volumes I, II and III of California Oil and Gas Fields, as well as non-hydrocarbon-bearing zones where the State had authorized injection. While the EPA exempted all of the hydrocarbon-bearing formations, as proposed, the EPA documented approval of non-hydrocarbon-producing formations in an attachment to the MOA. However, the EPA and DOGGR records include two versions of the attachment to the MOA, and there is not a clear record whether eleven of the requested non-hydrocarbon aquifer exemptions were approved by the EPA in 1983. Historical data provided by the State to the EPA in the primacy application indicates the eleven aquifers were nonhydrocarbon-bearing formations that contained water with less than 3,000 ppm total dissolved solids. Records also show the State has historically treated these eleven aquifers as exempt formations.

As part of the EPA's oversight of DOGGR's Class II program, DOGGR agreed to reevaluate the condition of the eleven aquifers historically treated as exempt and provide to the EPA a determination of whether the aquifers currently meet the regulatory criteria for exemption in 40 C.F.R. § 146.4. This

preliminary assessment, conducted by DOGGR and submitted to the EPA in July 15, 2015, concluded the available data did not support exemption of the aquifers under the federal regulatory criteria, but additional updated data provided by operators may indicate some areas of the eleven aquifers may qualify for future exemption proposals. Concurrently, DOGGR promulgated state regulations to phase out existing injection into these eleven aquifers historically treated as exempt unless an aquifer exemption proposal was submitted by the State and approved by the EPA subsequent to April 2015.¹ On November 15, 2016, DOGGR provided a public notice requesting comment on its preliminary assessment of the eleven aquifers and held a public hearing December 14, 2016. Subsequently, on February 9, 2017, the EPA approved two aquifer exemption requests submitted by DOGGR that contained a portion of the Walker Formation underlying the Round Mountain Oil Field and a portion of the Santa Margarita Formation underlying the Kern Front Oil Field, both of which are on the list of eleven aquifers historically treated as exempt.²

Finally, DOGGR submitted a package to the EPA on March 7, 2017, which contained DOGGR's determinations regarding the eleven aquifers, documentation of the public review process, and a proposed addendum to the CA Class II Program MOA. The addendum clarifies that the eleven aquifers are not exempt, except for the portions of these aquifers already approved as exempt by the EPA in the Fruitvale and Round Mountain Aquifer exemptions on February 9, 2017, and subject to any future aquifer exemptions proposed by DOGGR and approved by the EPA.

Conclusion

Under the federal UIC regulations, states such as California are authorized to propose aquifer exemptions to the EPA for approval at the time of primacy program approval and subsequent to the EPA's approval of primacy programs.³ Due to the absence of a clear historical record regarding the status of these aquifers when the EPA approved the State's Class II primacy program, the EPA finds it appropriate to document DOGGR's determination that the eleven aquifers historically treated as exempt are non-exempted aquifers under the State's primacy program and treated as non-exempt under current state regulations. The proposed MOA addendum transmitted to the EPA and enclosed with this letter will be included in the EPA's record of California's approved 1425 UIC Class II program.

I want to thank you and your staff for completing this effort. I appreciate the cooperation between our agencies and look forward to a continuation of our strong working relationship.

Sincerely,

10 30 March 2017

Acting Regional Administrator EPA Region 9

¹ Aquifer Exemption Compliance Schedule Regulations (Cal. Code Regs., tit. 14, § 1779.1.).

² DOGGR's aquifer exemption request for the Santa Margarita formation in the Fruitvale Oil Field, approved by EPA on February 9, 2017, included a small portion of the Santa Margarita that extends into the adjacent Kern Front Oil Field. This small portion of the Santa Margarita formation underlying the Kern Front Oil Field is exempt. The remainder of the Santa Margarita underlying the Kern Front field, which is hydraulically isolated from the small exempt portion, is a non-exempt aquifer. ³ 40 C.F.R.§ 144.7.