
State Water Resources Control Board

January 15, 2019

Kenneth A. Harris Jr., State Oil & Gas Supervisor
Department of Conservation
Division of Oil, Gas & Geothermal Resources
801 K Street, MS 18-05
Sacramento, CA 95814-3530
ken.harris@conservation.ca.gov

FINAL CONCURRENCE ON THE AQUIFER EXEMPTION PROPOSAL, BASAL SESPE, TAR CREEK TOPATOPA AREA, SESPE OIL FIELD, VENTURA COUNTY

Dear Mr. Harris:

State Water Resources Control Board staff, in consultation with Los Angeles Regional Water Quality Control Board staff (collectively Water Boards staff), have reviewed the proposal provided on October 10, 2016 by the Division of Oil, Gas and Geothermal Resources (DOGGR) for the expansion of the aquifer exemption for the Basal Sespe in the Tar Creek Topatopa Area of the Sespe Oil Field. Water Boards staff assessed whether the proposal meets the criteria set forth in California Public Resources Code (PRC) section (§) 3131 and § 146.4 of Title 40 of the Code of Federal Regulations (CFR) and considered comments received during the public comment process. Based on this review, State Water Board staff concur with the exemption proposal. In conjunction with the evaluation of current and future Class II underground injection control (UIC) projects in the proposed exempted area, DOGGR and Water Boards staff will consider incorporating conditions, described below, into UIC project approvals.

Public Comment Process

On February 3, 2017, State Water Board staff preliminarily concurred with the proposal to expand the exemption of the Basal Sespe pending the State's public comment process. On September 25, 2017, DOGGR published notice of the exemption proposal and opened a public comment period. DOGGR and State Water Board staff held a joint public hearing to receive comments on the exemption proposal on October 24, 2017. The comment period closed on November 8, 2017. DOGGR and State Water Board staff have reviewed and responded in writing to the comments received during the comment period and public hearing.

State and Federal Exemption Criteria

As required by PRC § 3131(a)(1) and 40 CFR § 146.4(a), the portion of the Basal Sespe proposed for exemption does not currently serve as a source of drinking water. No drinking water supply wells were identified within the proposed area. Three water supply wells were identified within the lateral boundaries of the proposed exempted area but are completed in shallower geologic formations and provide water for non-potable, industrial, and fire protection uses.

Consistent with 40 CFR § 146.4(b)(1), the proposed exempted area will not in the future serve as a source of drinking water because it is hydrocarbon producing or contains hydrocarbons that are expected to be commercially producible. In addition, as per PRC § 3131(a)(2), the injected fluids are not expected to affect the quality of water that is, or may reasonably be, used for any beneficial use because (1) the groundwater contained in the proposed exempted area is not expected to be put to beneficial use because it contains petroleum hydrocarbons, and also contains benzene, boron, chloride, naphthalene, radionuclides, toluene, and total dissolved solids at concentrations that limit its suitability for agricultural, domestic, and other beneficial uses, and (2) the injected fluids are expected to remain in the proposed exempted area.

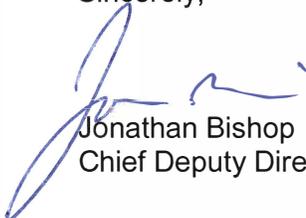
The requirement of PRC § 3131(a)(3) is also satisfied because a detailed technical review has demonstrated that the injected fluids are expected to remain in the proposed exempted area due to a combination of geologic conditions and operational controls. Hydrocarbon-bearing formations both overlie and underlie the proposed exempted area. The Basal Sespe has low permeability and the movement of fluid in the zone occurs predominantly in naturally-formed and artificially stimulated fractures. The low permeability of the Basal Sespe outside of these fractures, in conjunction with interbedded shales, will act to contain the migration of injected fluids. Fluid containment is also provided by an inward hydraulic pressure gradient.

Conditions on UIC Projects

Approval of Class II UIC projects involves a joint review by DOGGR and Water Boards staff. DOGGR and Water Boards staff will consider incorporating conditions into approvals of Class II UIC projects in the proposed exemption area. Potential conditions include, but are not limited to, monitoring to demonstrate that injected fluids remain in the proposed exempted area. If a water quality monitoring requirement is incorporated in a project approval, the operator must submit a plan to the Los Angeles Regional Water Quality Control Board for consideration.

If you have any questions regarding this matter, please contact Mr. John Borkovich at (916) 341-5779 or john.borkovich@waterboards.ca.gov.

Sincerely,



Jonathan Bishop
Chief Deputy Director

cc: Renee Purdy
Acting Executive Officer
Los Angeles Regional Water Quality Control Board
renee.purdy@waterboards.ca.gov

Pat Abel
Deputy, Coastal District
Department of Conservation
Division of Oil, Gas & Geothermal Resources
pat.abel@conservation.ca.gov