

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

May 28, 2015

Jonathan Bishop  
Chief Deputy Director  
California State Water Resources Control Board  
P.O. Box 100  
Sacramento, CA 95812-100

Steven Bohlen  
State Oil and Gas Supervisor  
Division of Oil, gas, and Geothermal Resources  
California Department of Conservation  
801 K Street. MS-18-05  
Sacramento, CA 95814-3530

Dear Messrs. Bishop and Bohlen:

Thank you for your May 15, 2015 letter describing the recent steps taken to address ongoing compliance issues with California's Class II Underground Injection Control (UIC) program. Your letter discussed the State's efforts to issue emergency regulations for Class II wells, conduct well reviews/evaluations, update the inventory of potential injection wells of concern, including cyclic steam wells, and issue enforcement and information collection orders to injection well operators.

Emergency Rulemaking for Injection Wells

The State's emergency regulations to codify deadlines for injection well operators to cease injection, absent EPA-approved aquifer exemptions, is a critical step in the State's plan to return the California Class II UIC program to compliance with the Safe Drinking Water Act. We look forward to the State's continued progress in this important administrative process by initiating a permanent rulemaking. Your letter indicates this initiation is on schedule to commence June 1, 2015.

Drinking Water Protection Well Evaluations

As we noted in our letter of March 9, 2015, it is important to identify the full universe of wells that are injecting into non-exempt aquifers, and to prioritize the review of these wells based on the potential risk to high quality ground water and existing water supply wells. Your May 15<sup>th</sup> submittal described completion of an initial review of Category 1 injection wells (i.e., Class II disposal wells injecting into non-exempt, non-hydrocarbon bearing aquifers, and those injecting into the 11 aquifers historically treated as exempt). As part of this review, you identified 53 disposal wells injecting into aquifers that have total

dissolved solids (TDS) concentrations below 3,000 ppm and have the potential to impact water supply wells, based on your initial screening criteria. To date, the State has assured shut-in of 23 of these 53 wells. For the remaining 30 wells in this sub-category, I understand that the Department of Conservation will clarify the status of each of these 30 wells within the next two weeks and take appropriate action (e.g., shut-in order, permit rescission) for any of the wells that could otherwise impact water supply wells. Please inform EPA of the State's evaluation of the 30 wells as soon as these determinations are made.

In addition, your letter describes 207 injection wells disposing into non-hydrocarbon-producing aquifers with 3,000-10,000 ppm TDS levels that you have determined require a more in-depth review to assess the need for further action to protect existing water supply wells. Since the purpose of the well evaluations/reviews is specifically to identify and address situations where injection wells are potentially impacting existing water supplies, it is critical for the State to expedite completion of this review. As we recently discussed, EPA strongly recommends that any of these 207 disposal wells that are within a one-mile radius of a water supply well be given top priority for completion of this review and immediate action to cease injection operations found to potentially endanger existing water supply wells. Please provide further information on the status of these disposal wells as your review continues, and no later than our next monthly update in June.

#### Updated Injection Well Inventory

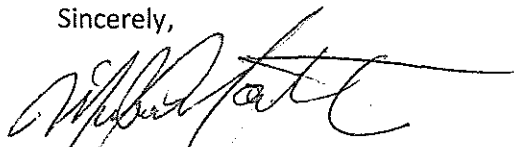
In response to EPA's request, the State's May 15<sup>th</sup> submittal included information about roughly 3,600 cyclic steam wells (a type of well that injects steam into a hydrocarbon-producing zone and also produces oil from the same wellbore) that may be injecting outside currently exempt zones. According to your letter, these wells are not associated with a permitted injection project in the Division's databases. In our recent discussions, you clarified that these cyclic steam wells would be included by the State as additional Category 2 wells – Class II enhanced oil recovery (EOR) wells injecting into non-exempt, hydrocarbon-bearing aquifers. As your letter notes, the Category 2 wells are scheduled to be reviewed and analyzed by July 31, 2015. In addition, the State has a target of submitting 90% of proposed aquifer exemptions for Category 2 wells by February 15, 2016. The final compliance deadline for the Category 2 injection wells, as codified in the State's recent emergency regulations, is February 15, 2017.

#### Enforcement and Information Collection Orders

The State's submittal included information on the 23 wells shut-in by enforcement orders or through voluntary permit relinquishment, as well as 157 other injection wells that received orders from the applicable Regional Water Quality Control Boards for data collection purposes. As the State continues to receive data from operators and evaluate the potential for injection wells to impact water supply wells, EPA expects to receive regular updates of these activities. EPA should be notified immediately if any injection well is determined to be potentially endangering an existing water supply well. Other updates should be provided as a regular item on our monthly update meeting agenda.

We look forward to continued efforts to protect California's drinking water resources and ensure full compliance with the Safe Drinking Water Act. Please don't hesitate to contact me if you have any questions or concerns.

Sincerely,

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

Michael Montgomery  
Associate Director  
Water Division