

# **AQUIFER EXEMPTION COMPLIANCE SCHEDULE REGULATIONS**

## **FINAL STATEMENT OF REASONS**

### **UPDATES TO THE INITIAL STATEMENT OF REASONS**

As authorized by Government Code section 11346.9, subsection (d), the Department of Conservation (Department) incorporates by reference the Initial Statement of Reasons prepared for this rulemaking.

In addition, the Department has the following updates to the Initial Statement of Reasons:

#### **Clarification Regarding Effect of the Proposed Regulations on Existing Permits**

The Initial Statement of Reasons included language which described the effect of the proposed regulations as a mechanism to “unwind” permits improperly allowing injection into non-exempt USDW zones. Based upon public comments received by the Department, it appears some commenters interpreted this language to mean that the proposed regulations would, as of the respective deadline dates, rescind permits for injection wells situated within non-exempt USDW zones. This interpretation is incorrect, however.

To clarify, the proposed regulations will not rescind existing permits. The proposed regulations simply enforce a pre-existing requirement of California’s Class II UIC program by providing that injection cannot occur into a non-exempt USDW aquifer beyond the applicable compliance deadline. The permit for any well injecting into a non-exempt USDW aquifer will not be rescinded on the compliance date; rather, absent other circumstances not relevant to the regulations, it is anticipated that injection operators can resume under the existing permit if and when the aquifer is covered by an aquifer exemption.

#### **Updated Inventory of Wells Potentially Injecting Into Non-Exempt USDW Zones**

Since issuance of the Initial Statement of Reasons, in the course of the ongoing interagency review of the State UIC program the Division has identified approximately 3,600 permitted cyclic steam wells that may be injecting near, but outside the boundaries of, exempted zones. Consequently, these cyclic steam wells may be injecting into non-exempt zones classified as underground sources of drinking water (USDW). As such, they are included in the inventory of existing injection wells with operations that may be affected by the proposed regulations. These roughly 3,600 cyclic steam wells are in addition to the inventory of roughly 2,500 wells previously identified as potentially injecting into non-exempt USDW zones, as described in the Initial Statement of Reasons.

A cyclic steam well is a type of well that injects steam into a hydrocarbon producing zone and also produces oil from the same wellbore. Accordingly, to the extent that the approximately 3,600 cyclic steam wells are injecting into non-exempt USDW zones, the February 15, 2017 compliance deadline contained in section 1779.1, subdivision (a)(3), of the proposed regulations will most typically be the applicable compliance deadline.

The addition of these approximately 3,600 cyclic steam wells to the estimated inventory of wells that may have been improperly approved for injection into non-exempt USDW zones does not materially change any of the analysis presented in the Initial Statement of Reasons. The specific purpose, rationale, and benefits of the proposed regulations remain the same.

Likewise, the economic impact assessment/analysis remains substantively unchanged by the inclusion of these additional cyclic steam wells. This is because the prohibition of injection into non-exempt USDW aquifers is a preexisting requirement and not a function of the proposed regulations.

As explained in the Initial Statement of Reasons, the proposed regulations may, to a small but unknown degree, affect the *timing* of potential negative impacts on California business and jobs. However, to the extent that a hastening or delaying effect does occur, and to the extent that these effects have an adverse impact on businesses, the impacts will be only temporary, transitional, and minimal. Significant impacts on businesses, if any, will depend not on precisely when prohibited injection operations halt, but rather on whether an exemption allowing continued injection operations will be obtained—a matter outside the scope of the proposed regulations.

Finally, the aquifers receiving injection from cyclic steam wells tend to be among those more likely to qualify for aquifer exemption due to their hydrocarbon-producing nature. The addition of these cyclic steam wells to the total inventory of affected wells therefore does not alter the conclusions of the economic impact assessment/analysis presented in the Initial Statement of Reasons.

## **JUSTIFICATION FOR INCORPORATION BY REFERENCE**

As described in the Initial Statement of Reasons, the proposed regulations incorporate by reference the entirety of the following document:

- Division of Oil, Gas, and Geothermal Resources Field Boundary Specifications 1 through 9 (dated April 1, 2015)

This document consists of several detailed, color-shaded maps. For that reason, publication of this document in the California Code of Regulations would be impractical.

This document is publicly available via the URL described within the text of the proposed regulations. It is also available from the Division upon request.

## **LOCAL MANDATE DETERMINATION**

The adoption of the proposed regulations does not impose any mandate on local agencies or school districts.

## **DETERMINATION REGARDING ALTERNATIVES CONSIDERED**

The Department has determined that no alternative identified for consideration would be more effective in carrying out the purpose for which the regulations are proposed, as effective and less burdensome to affected private persons than the proposed regulations, or more cost effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.

Following is supporting information for this determination, and explanation setting forth reasons for rejecting considered alternatives, including alternatives that might lessen adverse economic impact on small businesses.

In the course of developing the originally proposed regulations, the Department considered and rejected various alternative approaches. The Department also received numerous comments at two public hearings held in July of 2015, as well as hundreds of comments submitted in written form during the public comment period.

- The Department considered but rejected proposals to order or otherwise bring about an immediate halt to all injection operations occurring in non-exempt USDW zones. The Department determined that any method to achieve “immediate” statewide compliance with a mandate that all wells injecting into non-exempt USDW zones cease operations would not be more effective in carrying out the purpose for which the regulations are proposed, and would not be more cost effective to affected private persons. There are several reasons why. First, such an approach fails to consider the individual characteristics of the affected or potentially affected natural resources, including both groundwater and hydrocarbons. Second, determining whether any given well is injecting into a non-exempt USDW zone requires substantial and careful analysis. Without adequate time for review, immediate statewide shut down of all wells injecting into non-exempt USDW zones could only be effective if enforced in a vastly over-inclusive manner. Third, administrative enforcement takes time and resources. Implementing enforcement measures against an over-inclusive collection of injection wells on a statewide basis would be logistically difficult, as well as an inefficient use of agency resources. Moreover, any enforcement mechanism

employed by the Division must accommodate the procedures of due process, including the right to appeal an administrative order. An over-inclusive statewide enforcement effort would undoubtedly invite widespread, vigorous opposition, thereby thwarting the intended immediacy and needlessly jeopardizing the entire objective. Addressing the statewide issue of injection into non-exempt USDW zones in an effective and efficient manner requires a methodical approach and a wise application of agency resources. As elaborated in the Initial Statement of Reasons, the compliance schedule set forth in the proposed regulations establishes prioritized deadlines, allowing the Division to focus its resources on identifying and halting those injection activities posing the greatest risk to aquifers with the best potential to serve as sources of drinking water, while also providing fair notice to the regulated industry so as to incentivize cooperation and speed compliance. The Department believes this approach will provide the greatest protection of natural resources while also minimizing collateral harm to the public.

- The Department considered but rejected earlier and later cessation dates for injection into non-exempt USDW aquifers. The cessation dates used in the proposed regulations are a direct response to US EPA's explicit call for corrective action needed to bring the State UIC program into compliance with the Safe Drinking Water Act. This plan included a compliance schedule, prioritization and criteria utilized for injection well reviews, and case-by-case closure of an injection well in advance of the compliance deadline. All aspects of this plan were developed as the result of extensive discussions and collaboration between US EPA, the Department, and the State Water Resources Control Board. The prioritization of non-exempt USDW aquifers through the compliance schedule was discussed at length, and determined to be the most appropriate plan for ensuring the protection of public health, safety, and the environment, while mitigating disruption to existing oil and gas operations where there are no apparent threats to groundwater that might reasonably be expected to be a source of drinking water. Compliance schedules are routinely used by regulatory agencies, and are a legitimate exercise of prosecutorial discretion. US EPA approved and directed the Division to follow the compliance schedule. For these reasons, alternative compliance schedules were rejected as less effective in carrying out the regulatory purposes of bringing the State UIC program into compliance with the federal Safe Drinking Water Act, and protecting public health, safety, and the environment in an efficient manner.
- The Department considered but rejected the use of individual enforcement orders as the sole administrative mechanism for halting injection into non-exempt USDW aquifers and achieving compliance with the Safe Drinking Water Act. The Department rejected this alternative because it would be less effective in carrying

out the purpose of the regulations are proposed. The issuance and adjudication of potentially hundreds of individual enforcement orders would require considerably more time and resources than achieving compliance through a single administrative rulemaking. A single rulemaking is the most effective, efficient, and transparent administrative process for statewide implementation of the US EPA-approved corrective action plan. Codification of the aquifer exemption requirement in regulations sets more lasting, uniform standards, and provides greater certainty to the regulated community than enforcement orders alone.

- The Department considered but rejected specifying a timeframe for the Division's review of material submitted in support of applications for aquifer exemption. The Department determined that the purpose of the proposed regulations would be more effectively carried out by not specifying a timeframe for the Division's review of materials submitted in connection with applications for aquifer exemption. As written, the proposed regulations set deadlines by which aquifer exemptions must either be approved or else injection activities in non-exempt zones classified as underground sources of drinking water required to cease. These deadlines prioritize the preservation of groundwater resources, and appropriately place the onus for action on operators who desire to engage in injection activities. Limiting the timeframe for the Division's review would not improve the quality of the review, or even likely produce a faster agency determination. Approval of an aquifer exemption application is a multi-agency process, and the final decision ultimately rests with the US EPA. Constraining the time allowed for the Division's share of the review likely would only serve to correspondingly lengthen and complicate the concurrent reviews by the State Water Resources Control Board and regional water quality control boards, as well as the final review and ultimate determination to be made by US EPA.
- The Department considered but rejected increasing the minimum civil penalty for violation of the proposed regulations. Section 1779.1, subdivision (d) of the proposed regulations establishes a minimum civil penalty of \$20,000 for each day injection occurs in violation of the proposed regulations. Public Resources Code section 3236.5, subdivision (a), places a cap of \$25,000 on the civil penalty that the State Oil and Gas Supervisor may impose for any given instance of violation. Section 3236.5 also requires the State Oil and Gas Supervisor to consider several factors when determining the amount of civil penalty appropriate in a given situation. These factors include the extent of the harm caused by the violation, the persistence of the violation, the pervasiveness of the violation, and the number of prior violations by the same violator, in addition to any other relevant circumstances. Based upon relevant circumstances already identifiable as necessarily implicated by a violation

consisting of injection into a non-exempt USDW zone after the pertinent compliance deadlines, as well as the importance of creating an effective deterrent outweighing potential economic incentives for conducting injection operations in a non-exempt USDW zone, the State Oil and Gas Supervisor has determined that a minimum civil penalty of \$20,000 for each well for each day injection occurs is appropriate. The Department believes the civil penalty provision set forth in section 1779.1, subdivision (d), of the proposed regulations is well-tailored to incentivize compliance. Section 1779.1, subdivision (d), of the proposed regulations makes clear that the State Oil and Gas Supervisor retains discretion to increase the civil penalty, up to the statutory maximum, based upon further consideration of the statutory factors and other relevant circumstances applicable in any given situation. Limiting this discretion by establishing a higher minimum civil penalty amount would make the proposed regulations more burdensome to private persons, but would not make the proposed regulations any more effective in carrying out their intended purpose.

Except as set forth and discussed in the summary of and response to public comments, no other alternatives have been proposed or otherwise brought to Department's attention.

## **SUMMARY OF AND RESPONSE TO PUBLIC COMMENTS RECEIVED**

Due to the volume of public comments received regarding the proposed regulations, summaries of and responses to public comments are compiled in a separate document, located under Tab "I" in the rulemaking file, hereby incorporated by reference into this document. This includes written comments received during the initial notice period of May 29, 2015 through July 13, 2015, as well as comments received at two public hearings, held on July 15, 2015 in Bakersfield, California, and on July 16, 2016, in Santa Maria, California.