



## **Public Comment Summaries and Responses**

### **Aquifer Exemption Proposal for the Kern River and Upper Chanac Formations, Kern River Oil Field**

#### **I. Introduction:**

Prior to submitting the proposal for an exempted aquifer determination for the Kern River and Upper Chanac Formations in the Kern River Oil Field located in Kern County, California to the United States Environmental Protection Agency (US EPA), the California Geologic Energy Management Division (CalGEM), in association with the State Water Resources Control Board (State Water Board), conducted a public participation process to solicit input on the aquifer exemption proposal. Following publication of notice in a local newspaper and emailing notice to interested parties, public comments on the proposal were accepted from November 6, 2025 through December 22, 2025. On December 9, 2025, CalGEM conducted a public comment hearing in Bakersfield, California, and representatives from the State Water Board and US EPA were also present.

Over the course of the public comment period, CalGEM received a variety of public comments via email and at the public hearing. These comments ranged from general questions about the proposed aquifer exemption proposal to general concerns about various aspects related to oil and gas production. This document summarizes all comments received and presents CalGEM's responses to those comments.

To facilitate the process of reviewing and responding to the comments, CalGEM has assigned each comment a unique comment number, consisting of three components: first, a unique code number assigned to each commenter entity; second, a separating hyphen; third, a sequential number assigned to each comment from the identified commenter entity. Comment summaries have been arranged into groups based on similar topics of interest or concern. Responses to corresponding comments appear below the respective comment summaries, in italicized text. A table is included at the end of this document that provides the date the comment was received, the method in which the comment was provided, and the identified commenter entity.

#### **II. Comment Summaries and Responses:**

##### **Comments in Opposition**

###### **Topic: General Opposition**

Comments 3-1, 4-1, 5-1, 6-1, 7-1, 8-1, 9-1, 10-1, 10-2, 10-3, 10-4, 10-5, 12-1, 13-1, 14-1, 15-1, 16-1, 17-1, 18-1, 19-1, 20-1, 21-1, 22-1, 23-2, 24-1:

Commenters expressed general opposition to the aquifer exemption proposal and/or oil extraction activities, including hydraulic fracturing and enhanced oil recovery, and their associated impacts to beneficial use waters.

### Response to "General Opposition" Comments:

CalGEM acknowledges and understands the concern related to the potential risks associated with hydraulic fracturing or "fracking". With that being said, hydraulic fracturing is not a practice applied within the Kern River Oil Field. In addition, an aquifer exemption determination is not an approval or an entitlement to conduct enhanced oil recovery or any other activities. The safe conduct of injection operations is a broader issue not directly related to the aquifer exemption determination. Oil field activities, including ensuring injection pressure remains below the maximum allowable surface injection pressure to prevent hydraulic fracturing, are subject to regulatory oversight under existing laws.

The purpose of the aquifer exemption process is to assess the characteristics of the aquifer at issue. The criteria for aquifer exemption are established in federal law under title 40, part 146.4, of the Code of Federal Regulations, and expanded upon in state law under Public Resources Code section 3131. Under these laws, before making a recommendation to the US EPA that it designate an aquifer or portion of an aquifer exempt, CalGEM and the State Water Board and appropriate regional water quality control board (collectively, the Water Boards) must first evaluate the proposed exemption area to confirm that: (1) the proposed exemption area does not currently and will not in the future serve as a source of drinking water, (2) injection of fluids in the proposed exemption area will not affect the quality of water that is, or may reasonably be, used for any beneficial use, and (3) injected fluid will remain in the aquifer or portion of the aquifer that would be exempted.

Based on the information and analysis presented in the proposal materials, it is CalGEM's determination that the aquifer exemption proposal satisfies the prerequisite criteria for submission to the US EPA, as set forth in Public Resources Code section 3131, subdivision (a). The State Water Board has reviewed the proposal materials and concurred with CalGEM's determinations on a preliminary basis, as described in the State Water Board's Preliminary Concurrence Letter, dated May 14, 2025. As discussed in the proposal materials, these conclusions are based on multiple factors, including the presence of hydrocarbons in the proposed exemption areas, the absence of water supply wells completed within the proposed exemption areas, and a combination of operational controls and geologic conditions causing injected fluids to remain within the areas that would be exempted.

Regarding the use of produced or treated water for agricultural or other beneficial use purposes, such as deliveries to the Cawelo Water District, those uses are regulated separately by the appropriate water quality and public health agencies and are not governed by the aquifer exemption determination itself. The aquifer exemption decision solely addresses whether a specific portion of an aquifer may be excluded from protection as a potential drinking water source under the Safe Drinking Water Act. While CalGEM's role is focused on subsurface injection and protection of groundwater, the Water Boards and agricultural and public health agencies oversee the quality of water used for irrigation and its safe use on food crops. In this case, the produced water transferred to the Cawelo Water District is regulated by a permit issued by the Central Valley Regional Water Quality Control Board (R5-2012-0058). Water Boards staff have

preliminarily determined that injection activities will not affect the quality of water that is, or may reasonably be, used for any beneficial use, including agricultural use.

**Topic: Expansion Of Oil Extraction Activities.**

Comment #1-1:

Would this exemption expand the area in which fossil fuels may be drilled for and brought to the surface?

Response to Comment #1-1:

*This would not expand the area for which fossil fuels may be drilled for and brought to the surface. It would recognize the existing quality of the aquifer and allow for a greater area for injection to be considered. Operators would still be required to apply for injection approval in the proposed exemption area.*

**Topic: Current and/or Future Water Quality.**

Comment #1-2:

Would "the existing quality of the aquifer be endangered by allowing for a greater area for injection to be considered?"

Comment #2-1:

A question about the proposal. The proposal states that only the produced water will be returned to the reservoir from which it is produced. Having been involved with upstream operations around the world I find it interesting that this field apparently doesn't have to use chemicals to separate the oil and water phases. Hopefully there aren't any toxic emulsion breakers, anti foam, scale inhibitors, ... chemicals being used in the process. Also if the injection volume is being supplemented with surface water to increase the efficiency of the flood, then the chemicals required to control SRB's would have to be considered! Perhaps cover this topic during the next review.

Response to Comments #1-2 and #2-1:

*The source of injection fluid would be produced water from the same formation. Consistent with Public Resources Code section 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) groundwater contained in the proposed exempted area contains petroleum hydrocarbons, (2) injected fluids will be of similar or better quality than the existing groundwater in the proposed exempted area, and (3) the injected fluids are expected to remain in the proposed exempted area. In order to confirm that injected fluids are of similar or better quality than the existing groundwater in the exempted area, Water Boards staff may seek the inclusion of a requirement to monitor for all chemical compounds and elements that constitute the chemicals and additives used in petroleum exploration, production, treatment, and injection where there are Environmental Laboratory Accreditation Program (ELAP)-approved analyses. If a monitoring requirement is incorporated in a UIC project approval, the operator must submit a work plan to the Central Valley Regional Water Quality Control Board for approval.*

## **Topic: California's Groundwater Aquifers.**

### Comment #1-3:

My understanding is that CA aquifers are endangered by 1) water withdrawals that exceed water refilling, 2) human interventions that result in contamination. Questions are: 1) Do CA's aquifers have the capacity to store rainwater and snow melt if both could be directly drained into them? And 2) How often do aquifers fill up and overflow?

### Response to Comment #1-3:

*California has a vast number of aquifers, and many aquifers have the capacity to store water and are routinely replenished or 'recharged' naturally as surface waters (including rain, snow melt, rivers) seep into the ground. Data from this proposal indicate the aquifer is isolated and is not recharged by precipitation.*

## **Topic: Conduit Analysis.**

### Comment #23-1:

I think one of the worries that I have is the amount of wells that are in the area and the amount of issues that can create with messing with the integrity of the silt formations and the difference in the pressure and what that can mean to the separation of the silt formation. Some of the risk factors that are noted for water quality and exemption is faulty or aging well casings. CalGEM has done state estimation -- cost estimation study for wells and well casings that show that there was a high degree of failure for old well casing which is -- there is a lot of old well infrastructure in that field. Some of the wells were with telephone poles or tons of paper -- literal tons of paper that were shoved down the holes. So I think making sure that the surrounding casings have proper integrity and that they haven't messed with the integrity of the silt formation that are meant to be sealing is important....

### Comment #23-3:

Sorry. I took notes. I think the -- I heard that testing was done at the lower wells because that's kind of where the pressure pulls the water into. And I would also want to know or make sure that there is testing done in the northern part where the exemption is gonna happen to make sure that we have control tests to be able to compare the water to so that there is records. Because I think one of my other asks and flags is to make sure that there is increased monitoring in the areas around the exemption to make sure that we have control tests for what the water quality is now and what it could be further on down the line to make sure if there is any migration or issues that we can track that and make sure we know when it happened and when any intervention needs to be done. I already talked about the integrity of the silt barriers and making sure they are intact. And I think some of the findings were based in -- based on the fact that there's an assumption that the casings were gonna be properly maintained. And I think for the -- if there's any new casings that are gonna be used in the steam injection, that the integrity might be something we rely on but the integrity of the casings in the wells that already exist and that's something that should be relied on. And I think that's evidence in the cost estimation study that CalGEM did. So I would like to make sure that there's findings or something that can make sure that there is confidence in the fact that this increase or change in pressure wouldn't, you know, cause any path of less resistance to lead to

leaks from the old infrastructure in the oil field. So I think overall I would like to make sure that there's increased monitoring and testing done in and around the area, especially right on the border of the exemption. My house is quite close to this area so I think I'm saying this quite selfishly, but I think making sure that we track this is part of making sure that doesn't get worse is part of the responsibility to make sure that there's proper mitigation in place in case there is anything that happens or any migration, and making sure that we can find the migration as soon as possible.

Response to Comments #23-1 and #23-3:

*Consistent with PRC 3131(c), a comprehensive conduit analysis review was conducted by CalGEM and Water Board staff to evaluate the potential for fluid to migrate outside of the proposed aquifer exemption area into overlying beneficial use aquifers. The review evaluated all idle and plugged and abandoned wells within the proposed aquifer exemption area to ensure that injected fluid will remain in the portion of the aquifer that would be exempted.*

*As part of this review, in December 2021, the operator submitted wellbore diagrams and well integrity information to CalGEM and State Water Board staff for all idle and abandoned wells located in the proposed aquifer exemption area. State Water Board and CalGEM staff identified 24 potential conduit wells. The operator submitted mitigation strategies in 2022 and 2024 and after revisions to the proposed aquifer exemption boundary, seven potential conduit wells remained within the boundary. All seven potential conduit wells were plugged and abandoned in 2023 and verified by wellbore diagrams, thereby eliminating them as potential migration pathways within the proposed exemption area.*

*With respect to concerns regarding aging infrastructure and historical well construction practices, CalGEM's regulatory framework requires that all wells—whether active, idle, or abandoned—meet current integrity and abandonment standards to minimize the risk of fluid migration. Existing state law also imposes testing, maintenance, and management requirements for idle wells, as well as stringent plugging and abandonment requirements, to reduce risks associated with older wells and legacy infrastructure.*

*An aquifer exemption determination does not authorize or approve any specific injection project. Any new or modified injection operation must undergo a separate permitting process under the State's Underground Injection Control (UIC) program. That process includes a project-specific technical review of geologic confinement, pressure management, identification of all surrounding wells, and demonstration that injected fluids will be confined to the approved zone and will not adversely affect protected waters. Monitoring requirements are established at the project approval stage and are tailored to site-specific conditions, including pressure behavior, geologic sealing units, and nearby wells.*

## **Topic: Climate Change.**

### Comment #11-1:

California, and the rest of the world, need to phase out fossil fuels. I oppose any expansion of fossil fuel production in our state. California must lead the nation. The United States, as the wealthiest country and the country most responsible for the climate emergency, must lead the world in ending fossil fuels.

### Response to Comment #11-1:

*CalGEM prioritizes protecting public health, safety, and the environment in its oversight of the oil industry while working to help California achieve its climate change and clean energy goals. As described in Public Resources Code section 3011, CalGEM's mission includes considering measures to reduce and mitigate greenhouse gas emissions associated with the development of hydrocarbon resources in a manner that meets the energy needs of the state.*

*Here, the decision at issue is not whether to approve specific activities related to hydrocarbon production but rather an evaluation of whether the characteristics of a particular aquifer align with applicable criteria set in state and federal law. If approved, the proposed aquifer exemption would not act as an approval or an entitlement to conduct injection operations, or any other activities. The purpose of the aquifer exemption process is to assess the characteristics of the aquifer at issue. The criteria for aquifer exemption are established in federal law under title 40, part 146.4, of the Code of Federal Regulations, and expanded upon in state law under Public Resources Code section 3131. Under these laws, before making a recommendation to the US EPA that it designate an aquifer or portion of an aquifer exempt, CalGEM and the Water Boards must first evaluate the proposed exemption area to confirm that: (1) the proposed exemption area does not currently and will not in the future serve as a source of drinking water, (2) injection of fluids in the proposed exemption area will not affect the quality of water that is, or may reasonably be, used for any beneficial use, and (3) injected fluid will remain in the aquifer or portion of the aquifer that would be exempted. Phasing out fossil fuels and greenhouse gas emissions are not among the criteria for aquifer exemption under applicable state or federal law. If approved, the proposed aquifer exemption would not excuse injection operations in the proposed exemption area from compliance with other applicable requirements.*

## **Comments in Support**

### **General Support**

#### Comments 25-1, 26-1:

Commenters expressed general support for the aquifer exemption proposal.

#### Response to Comments #25-1 and #26-1:

Noted.

<b>Comment Number</b>	<b>Date Received</b>	<b>Source</b>	<b>From</b>	<b>Comment Grouping</b>	<b>Sub-Grouping</b>
1-1	11/6/2025	Email	Peter Reimer	Comment in opposition	Expansion of oil extraction activities
1-2	11/6/2025	Email	Peter Reimer	Comment in opposition	Current and/or future water quality
1-3	11/7/2025	Email	Peter Reimer	Comment in opposition	California's groundwater aquifers
2-1	11/6/2025	Email	Jim Siefkin	Comment in opposition	Current and/or future water quality
3-1	11/6/2025	Email	Mary Burke	Comment in opposition	General opposition
4-1	11/6/2025	Email	Sherrill Futrell	Comment in opposition	General opposition
5-1	11/6/2025	Email	Robert Gaulding	Comment in opposition	General opposition
6-1	11/6/2025	Email	Bill Woodbridge	Comment in opposition	General opposition
7-1	11/6/2025	Email	Deborah Kennedy	Comment in opposition	General opposition
8-1	11/6/2025	Email	Cinda Johansen	Comment in opposition	General opposition
9-1	11/6/2025	Email	Dan Emmett	Comment in opposition	General opposition
10-1	11/6/2025	Email	Kyle Bracken	Comment in opposition	General opposition
10-2	11/6/2025	Email	Kyle Bracken	Comment in opposition	General opposition
10-3	11/6/2025	Email	Kyle Bracken	Comment in opposition	General opposition
10-4	11/6/2025	Email	Kyle Bracken	Comment in opposition	General opposition
10-5	11/6/2025	Email	Kyle Bracken	Comment in opposition	General opposition
11-1	11/7/2025	Email	Gladys Delgadillo	Comment in opposition	Climate change
12-1	11/7/2025	Email	Jeannie Ricketts	Comment in opposition	General opposition
13-1	11/7/2025	Email	Randy Vogel	Comment in opposition	General opposition

<b>Comment Number</b>	<b>Date Received</b>	<b>Source</b>	<b>From</b>	<b>Comment Grouping</b>	<b>Sub-Grouping</b>
14-1	11/7/2025	Email	Adam Kaplan	Comment in opposition	General opposition
15-1	11/7/2025	Email	Pete Chiapella	Comment in opposition	General opposition
16-1	11/8/2025	Email	Tom Kunhardt	Comment in opposition	General opposition
17-1	11/15/2025	Email	John Lucas	Comment in opposition	General opposition
18-1	11/15/2025	Email	Jonathan Bailin	Comment in opposition	General opposition
19-1	11/18/2025	Email	Kirt Germond	Comment in opposition	General opposition
20-1	11/18/2025	Email	Nadine Dumser	Comment in opposition	General opposition
21-1	11/18/2025	Email	thebrandnewyear@gmail.com	Comment in opposition	General opposition
22-1	11/20/2025	Email	710moz@gmail.com	Comment in opposition	General opposition
23-1	12/9/2025	In-person at KR Public Hearing	Cesar Aguirre	Comment in opposition	Conduit analysis; general opposition
23-2	12/9/2025	In-person at KR Public Hearing	Cesar Aguirre	Comment in opposition	General opposition
23-3	12/9/2025	In-person at KR Public Hearing	Cesar Aguirre	Comment in opposition	Conduit analysis; general opposition
24-1	12/9/2025	In-person at KR Public Hearing	Gabriella Ojeda	Comment in opposition	General opposition
25-1	12/22/2025	Email	Zorka Gojkovich, Chevron	Comment in support	General support
26-1	12/22/2025	Email	Christine Zimmerman, WSPA	Comment in support	General support