

**PUBLIC NOTICE OF DETERMINATION AND REQUEST FOR U.S. EPA ACTION REGARDING ELEVEN  
AQUIFERS HISTORICALLY TREATED AS EXEMPT:**

**The Pico Formation underlying the boundaries of the South Tapo Canyon Field**

**The Tumeay Formation underlying the boundaries of the Blackwell's Corner Field**

**The Kern River Formation underlying the boundaries of the Kern Bluff Field**

**All aquifers underlying the boundaries of the Bunker Gas Field that are not in a hydrocarbon-producing zone**

**The Santa Margarita Formation underlying the boundaries of the Kern River Field**

**The Chanac Formation underlying the boundaries of the Kern River Field**

**The Walker Formation underlying the boundaries of the Mount Poso Field**

**The Olcese Formation underlying the boundaries of the Round Mountain Field**

**All aquifers underlying the boundaries of the Wild Goose Field that are not in a hydrocarbon-producing zone**

**The Walker Formation underlying the boundaries of the Round Mountain Field**

**The Santa Margarita Formation underlying the boundaries of the Kern Front Field**

**30-DAY PUBLIC COMMENT PERIOD**

Notice Published November 15, 2016

**NOTICE IS HEREBY GIVEN** that the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources ("Division"), in consultation with the State Water Resources Control Board ("Water Board") (collectively, "State Agencies"), intends to advise the United States Environmental Protection Agency ("US EPA") that ten of the eleven aquifers historically treated as exempt do not meet the federal regulatory criteria for exemption from the federal Safe Drinking Water Act ("SDWA"). Accordingly, the State Agencies intend to request an amendment to the Memoranda of Agreement between the Division and US EPA for the purpose of clarifying that these aquifers are not exempt aquifers.

In addition, the State Agencies intend to advise US EPA that the one other aquifer historically treated as exempt – the Walker Formation underlying the Round Mountain Field – is currently the subject of aquifer exemption proposals. The proposal for the Walker Formation has been finalized and published for public comment (but not yet submitted to US EPA). Portions of this aquifer are included in the exemption proposal, while other portions are not included. The State Agencies therefore intend to also request that the amendment to the Memoranda of Agreement between the Division and US EPA clarify that this aquifer is *not* exempt, except with respect to any portion(s) that US EPA approves for exemption as a result of a future exemption proposal.

## **WRITTEN COMMENT PERIOD AND PUBLIC COMMENT HEARING**

Any person, or his or her authorized representative, may submit to the Department of Conservation (“Department”) written statements, arguments, or comments relevant to this determination. Comments may be submitted by email to [comments@conservation.ca.gov](mailto:comments@conservation.ca.gov), by facsimile (fax) to (916) 324-0948, or by mail to:

Department of Conservation  
801 K Street, MS 24-02  
Sacramento, CA 95814  
ATTN: Eleven Aquifers

**The written comment period closes at 5 p.m. on December 16, 2016.** The Department will not consider any comments received at the Department’s offices after that time.

Additionally, any interested person, or their authorized representative, may present, either orally or in writing, comments regarding the proposed action at the public hearing, to be held at the following time and place:

December 14, 2016 at 4pm  
Four Points Sheraton  
5101 California Avenue  
Bakersfield, CA 93309

Services, such as translation between English and other languages, may be provided upon request. To ensure availability of these services, please make your request no later than ten working days prior to the hearing by calling the staff person identified in this notice.

Servicios, como traducción de inglés a otros idiomas, pueden hacerse disponibles si usted los pide en avance. Para asegurar la disponibilidad de éstos servicios, por favor haga su petición al mínimo de diez días laborables antes de la reunión, llamando a la persona del personal mencionada en este aviso.

### **BACKGROUND**

The Division regulates the underground injection of fluids associated with oil and gas production (“Class II injection”) through an underground injection control (“UIC”) program approved by US EPA pursuant to the federal SDWA. The SDWA requires the protection of underground sources of drinking water (“USDWs”), which are defined broadly in federal regulation as including any aquifer that supplies or contains a sufficient quantity of groundwater to supply a public water system and that has a total dissolved solids (“TDS”) composition of less than 10,000 mg/l. (See 40 C.F.R. § 144.3.)

Under federal law, an aquifer, or a portion of an aquifer, that would otherwise qualify as a USDW may be “exempted” from protection as a USDW if it meets specific exemption criteria enumerated in federal regulation and undergoes an exemption process that involves both the State and US EPA. (See 40 C.F.R., §§ 146.4, 144.7.) Specifically, a USDW may be exempted for purposes of Class II injection if it meets the following criteria:

- (a) It does not currently serve as a source of drinking water; and

(b) It cannot now and will not in the future serve as a source of drinking water because:

(1) It is mineral, hydrocarbon or geothermal energy producing, or can be demonstrated by a permit applicant as part of a permit application for a Class II or III operation to contain minerals or hydrocarbons that considering their quantity and location are expected to be commercially producible.

(2) It is situated at a depth or location which makes recovery of water for drinking water purposes economically or technologically impractical;

(3) It is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption; or

(c) The TDS content of the ground water is more than 3,000 and less than 10,000 mg/l and it is not reasonably expected to supply a public water system.

(40 C.F.R. § 146.4.). Exempted aquifers may be designated by the State and submitted to US EPA for review and possible approval. No aquifer exemption is valid unless and until it is approved by US EPA. (See 40 C.F.R. § 144.7.)

When US EPA approved the State's UIC program in 1983, the Division and US EPA entered a Memorandum of Agreement ("Primacy MOA") that identified the aquifers for which US EPA granted aquifer exemptions. Program records have produced two competing versions of the Primacy MOA, each with the same signature page and dates, which differ with respect to the non-hydrocarbon-producing aquifers US EPA agreed to exempt. One version purports to deny exemptions for eleven non-hydrocarbon-producing aquifers, while the second version purports to approve exemptions for those same aquifers. The Division and US EPA have historically treated these eleven aquifers as exempt. Following a US EPA audit of the State's UIC program in 2012, US EPA determined that these eleven aquifers may not actually be exempt, and ordered the State to reevaluate the aquifers to ascertain whether the aquifers meet the federal exemption criteria and whether the aquifers are appropriate for ongoing injection of fluid associated with oil and gas production. Additionally, US EPA prescribed detailed corrective actions to bring the State's UIC program into compliance with the SDWA. One of the corrective actions requires the State to prohibit injection into the eleven aquifers "historically treated as exempt" by December 31, 2016 absent a US EPA determination that the aquifer(s) meet the regulatory criteria for exemption. The Division has implemented this and other compliance dates in its Aquifer Exemption Compliance Schedule Regulations. (Cal. Code Regs., tit. 14, § 1779.1.)

#### **DETAILS OF THE STATE AGENCIES' DETERMINATION**

##### **Ten Aquifers Have Not Been Shown to Meet Exemption Criteria**

Based on the available information, the State Agencies' current assessment is that ten of the eleven aquifers do not meet the federal regulatory criteria for exemption from the SDWA. These aquifers may in the future serve as a source of drinking water. The ten aquifers are:

- The Pico Formation underlying the boundaries of the South Tapo Canyon Field.
- The Tumey Formation underlying the boundaries of the Blackwell's Corner Field.
- The Kern River Formation underlying the boundaries of the Kern Bluff Field.

- All aquifers underlying the boundaries of the Bunker Gas Field that are not in a hydrocarbon-producing zone.
- The Santa Margarita Formation underlying the boundaries of the Kern River Field.
- The Chanac Formation underlying the boundaries of the Kern River Field.
- The Walker Formation underlying the boundaries of the Mount Poso Field.
- The Olcese Formation underlying the boundaries of the Round Mountain Field.
- All aquifers underlying the boundaries of the Wild Goose Field that are not in a hydrocarbon-producing zone. \*
- The Santa Margarita Formation underlying the boundaries of the Kern Front Field.

The State Agencies' current assessment of these ten aquifers, and the proposed request to US EPA, would not preclude future consideration of exemption proposals. If the State Agencies in the future receive new information establishing that any of these aquifers, or portions thereof, meet the exemption criteria and are appropriate for injection, the State Agencies may elect to submit an aquifer exemption proposal to US EPA following the required legal procedure, including public notice and a public hearing.

#### **Portions of One Aquifer May Qualify for Exemption**

Portions of one of the eleven aquifers historically treated as exempt are being considered for exemption. That aquifer is:

- The Walker Formation underlying the boundaries of the Round Mountain Field.

An exemption proposal for the Walker Formation underlying the Round Mountain Field has been finalized and the Division is currently considering public comments on the proposal.<sup>†</sup> Only those portions of the Walker formation that are included in the State Agencies' exemption proposal and approved for exemption by US EPA should be confirmed as exempt. The omission of any portion(s) of the formations from a final exemption proposal would be due to there being a lack of evidence for the State Agencies to find that such portion(s) are eligible for exemption. Accordingly, the State Agencies intend to request an amendment to the Memoranda of Agreement between the Division and US EPA for the purpose of clarifying that the Walker Formation underlying the Round Mountain Field is not exempt, except with respect to any portions of the formation that US EPA approves for exemption as a result of a future exemption proposal submitted to US EPA.

#### **DOCUMENTS AVAILABLE FOR REVIEW**

Documents reviewed by the State Agencies in the course of making this determination are available on the Division's public internet website at:

[http://www.conservation.ca.gov/dog/Pages/Aquifer\\_Exemptions.aspx](http://www.conservation.ca.gov/dog/Pages/Aquifer_Exemptions.aspx).

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<sup>†</sup> The proposal and supporting materials for the Round Mountain Field exemption are available at [http://www.conservation.ca.gov/dog/Pages/Aquifer\\_Exemptions.aspx](http://www.conservation.ca.gov/dog/Pages/Aquifer_Exemptions.aspx).

### **RESPONSE TO COMMENTS**

The State Agencies will review and respond to all timely and relevant comments received (including oral comments received at the hearing) following the written comment period and public hearing. Thereafter, the Division may proceed with the request to US EPA to amend the Memoranda of Agreement between the Division and US EPA for the purpose of clarifying the exempt status of the eleven aquifers.

### **CONTACT PERSON**

Inquiries concerning the proposed action may be directed to:

Tim Shular  
Department of Conservation  
801 K Street, MS 24-02  
Sacramento, CA 95814  
Phone: (916) 322-3080  
Email: [Comments@conservation.ca.gov](mailto:Comments@conservation.ca.gov)