

## **AB 356 (Williams)**

### **Groundwater Protection and Underground Injection Control Program Reform**

#### **SUMMARY**

AB 356 requires that the State Water Resources Control Board (SWRCB) provide written concurrence prior to aquifer exemption proposals being submitted by the Division of Oil, Gas, and Geothermal Resources (DOGGR) to U.S. EPA. Additionally, AB 356 requires that underground injection project operators submit a groundwater management monitoring plan prior to project approval or through the annual review process.

#### **BACKGROUND**

Groundwater resources play a vital role in maintaining California's economic and environmental sustainability. California's 515 alluvial groundwater basins and sub-basins provide close to 40 percent of the state's water supply in an average year. In some regions of the state, groundwater accounts for as much as 60 percent of the supply during dry or drought years. Many municipal, agricultural, and disadvantaged communities rely on groundwater for up to 100 percent of their water supply needs. Nine out of ten public water systems rely on groundwater for at least a portion of their supply. Contaminated groundwater often results in treatment, well closures, or new well construction, which increases costs for consumers.

In 1974 the Safe Drinking Water Act gave the US Environmental Protection Agency (USEPA) the authority and responsibility to control underground injection to protect underground drinking water sources. In 1982 a primacy agreement was signed that allowed DOGGR to implement the USEPA's Underground Injection Control (UIC) program for oil and gas wells in California. It has recently been discovered that there were two versions of this agreement, one allowing exemptions for 11 aquifers with high water quality and another denying those exemptions. DOGGR's UIC permitting decisions have been based on the assumption that these exemptions were granted for the 11 aquifers in question.

A 2011 USEPA audit of DOGGR's UIC program implementation concluded that DOGGR was misclassifying underground sources of drinking water and doing an insufficient job with monitoring the program. In June 2014 it was discovered that DOGGR was approving injection wells in nonexempt aquifers. At this time the US

Governmental Accountability Office released a report on the UIC program that determined the USEPA was not consistently conducting key oversight and enforcement activities and that California regulations have limited chemical reporting requirements for injection fluid composition.

#### **NEED FOR THE BILL**

There are currently almost 2,500 injection wells operating in non-exempt aquifers. These injections into protected aquifers violate federal law and fail to protect groundwater that could be used for drinking water or other beneficial uses. So far, the state has shut down 24 injection wells because they were injecting into aquifers that could be suitable for drinking water.

Previous legislation and current groundwater quality monitoring does not and will not provide oversight and assurances that underground sources of drinking water are protected within the UIC program. SB 4 (Pavley, 2013) requirements for groundwater monitoring plans only apply to oil and gas well stimulation. Groundwater management legislation passed in 2014 (SB 1168, SB 1319, and AB 1739) will likely not provide the necessary aquifer monitoring data. SWRCB currently does have a program that collects groundwater quality data, but this program does not provide the specific data necessary for effective underground injection oversight.

Specifically, this bill will:

1. Ensure that aquifer exemptions are thoroughly vetted by DOGGR and SWRCB with public input prior to submitting them to the U.S EPA.
2. Require that injection projects are regularly reviewed to ensure compliance with federal and state rules.
3. Ensure oil and gas operators' injection projects utilize appropriate aquifers.
4. Require monitoring plans to ensure underground injection does not pollute water that could be used for drinking water or other beneficial uses and that injections do not migrate into nearby protected aquifers.

AB 356 enhances oversight and accountability within the UIC program and will provide the data necessary for the long-term protection of a valuable public resource. As

California deals with the fourth year of drought conditions, protecting groundwater has become more important than ever.

## **SUPPORT**

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- Clean Water Action
- Environmental Working Group
- Natural Resources Defense Council

## **OPPOSITION**

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- None on file

## **FOR MORE INFORMATION**

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AMENDED IN ASSEMBLY MARCH 17, 2015

CALIFORNIA LEGISLATURE—2015–16 REGULAR SESSION

**ASSEMBLY BILL**

**No. 356**

**Introduced by Assembly Member Williams  
(Coauthors: Assembly Members Nazarian and Mark Stone)**

February 17, 2015

An act to amend ~~Section 3106~~ *Sections 3106 and 3401* of, and to add ~~Section 3106.1 to~~, *Article 2.5 (commencing with Section 3130) to Chapter 1 of Division 3 of*, the Public ~~Utilities Resources~~ *Utilities Resources* Code, and to add Section 13227.5 to the Water Code, relating to oil and gas.

LEGISLATIVE COUNSEL'S DIGEST

AB 356, as amended, Williams. Oil and gas: groundwater monitoring.

(1) Existing law requires the State Oil and Gas Supervisor to supervise the drilling, operation, maintenance, and abandonment of wells and the operation, maintenance, and removal or abandonment of tanks and facilities attendant to oil and gas production. Existing law authorizes the supervisor to require a well operator to implement a monitoring program, designed to detect releases to the soil and water, for aboveground oil production tanks and facilities. Under existing law, a person who fails to comply with specified requirements relating to the regulation of oil or gas operation is guilty of a misdemeanor.

This bill would additionally authorize the supervisor to require a well operator to implement a monitoring program for belowground oil production tanks and facilities, and disposal and injection ~~wells~~, *wells*. Because a failure to comply with this requirement would be a crime, this bill would impose a state-mandated local program.

(2) The federal Safe Drinking Water Act regulates certain wells as Class II ~~injection~~ wells. Under existing federal law, the authority to

regulate Class II ~~injection~~ wells in California is delegated to the Division of Oil, Gas, and Geothermal Resources. Under existing regulations, a well operator is required to obtain approval from the supervisor or a district deputy for a subsurface injection or disposal project, including Class II ~~injection~~ wells, or any change in a project, as provided.

This bill would *require the division to annually review underground injection or disposal projects approved by the division that use Class II wells. The bill would require ~~an~~ the operator of a Class II ~~injection well~~, the project, as a part of its application or ~~notice of change the~~ annual review process, to submit to ~~an~~ the State Water Resources Control Board or appropriate regional water quality control board for its review a groundwater monitoring plan containing certain information, including, among other things, a schedule for monitoring and reporting groundwater quality ~~data~~: data, as provided. The bill would require the data be submitted to the ~~State Water Resources Control Board~~ state board for inclusion in the state board's geotracker database. Because a violation of this requirement would be a crime, this bill would impose a state-mandated local program. The bill would require the *state board* or regional water quality control board to review and ~~approve~~ authorize them to provide a written concurrence for the plan.*

*(3) Existing federal law prohibits certain well activities that affect underground sources of drinking water unless those sources are located in an exempt aquifer. Existing federal law authorizes a state delegated with the responsibility of regulating Class II wells to propose that an aquifer or a portion of an aquifer be an exempt aquifer and authorizes the United States Environmental Protection Agency to approve the proposal if the aquifer or a portion of the aquifer meets certain criteria.*

*This bill would require the division, prior to proposing to the United States Environmental Protection Agency an aquifer for exemption, to hold a public hearing on the proposal and to submit the proposal to the state board for review and written concurrence. The bill would authorize the state board to concur with the proposal if certain conditions are met.*

~~(3)~~

*(4) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.*

*This bill would provide that no reimbursement is required by this act for a specified reason.*

Vote: majority. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: yes.

*The people of the State of California do enact as follows:*

1 SECTION 1. Section 3106 of the Public Resources Code is  
2 amended to read:

3 3106. (a) The supervisor shall so supervise the drilling,  
4 operation, maintenance, and abandonment of wells and the  
5 operation, maintenance, and removal or abandonment of tanks and  
6 facilities attendant to oil and gas production, including pipelines  
7 not subject to regulation pursuant to Chapter 5.5 (commencing  
8 with Section 51010) of Part 1 of Division 1 of Title 5 of the  
9 Government Code that are within an oil and gas field, so as to  
10 prevent, as far as possible, damage to life, health, property, and  
11 natural resources; damage to underground oil and gas deposits  
12 from infiltrating water and other causes; loss of oil, gas, or reservoir  
13 energy; and damage to underground and surface waters suitable  
14 for irrigation or domestic purposes by the infiltration of, or the  
15 addition of, detrimental substances.

16 (b) The supervisor shall also supervise the drilling, operation,  
17 maintenance, and abandonment of wells so as to permit the owners  
18 or operators of the wells to utilize all methods and practices known  
19 to the oil industry for the purpose of increasing the ultimate  
20 recovery of underground hydrocarbons and which, in the opinion  
21 of the supervisor, are suitable for this purpose in each proposed  
22 case. To further the elimination of waste by increasing the recovery  
23 of underground hydrocarbons, it is hereby declared as a policy of  
24 this state that the grant in an oil and gas lease or contract to a lessee  
25 or operator of the right or power, in substance, to explore for and  
26 remove all hydrocarbons from any lands in the state, in the absence  
27 of an express provision to the contrary contained in the lease or  
28 contract, is deemed to allow the lessee or contractor, or the lessee's  
29 or contractor's successors or assigns, to do what a prudent operator  
30 using reasonable diligence would do, having in mind the best  
31 interests of the lessor, lessee, and the state in producing and  
32 removing hydrocarbons, including, but not limited to, the injection  
33 of air, gas, water, or other fluids into the productive strata, the  
34 application of pressure heat or other means for the reduction of  
35 viscosity of the hydrocarbons, the supplying of additional motive

1 force, or the creating of enlarged or new channels for the  
 2 underground movement of hydrocarbons into production wells,  
 3 when these methods or processes employed have been approved  
 4 by the supervisor, except that nothing in this section imposes a  
 5 legal duty upon the lessee or contractor, or the lessee's or  
 6 contractor's successors or assigns, to conduct these operations.

7 (c) The supervisor may require an operator to implement a  
 8 monitoring program, designed to detect releases to the soil and  
 9 water, including both groundwater and surface water, for  
 10 aboveground and belowground oil production tanks and facilities,  
 11 and disposal and injection wells.

12 (d) To best meet *the* oil and gas needs in this state, the supervisor  
 13 shall administer this division so as to encourage the wise  
 14 development of oil and gas resources.

15 ~~SEC. 2. Section 3106.1 is added to the Public Resources Code,~~  
 16 ~~to read:~~

17 ~~3106.1. (a) Notwithstanding subdivision (c) of Section 3106,~~  
 18 ~~for a well that is a Class II injection well pursuant to the federal~~  
 19 ~~Safe Drinking Water Act (42 U.S.C. Sec. 311f et seq.), an operator~~  
 20 ~~submitting an application for approval pursuant to Section 1724.6~~  
 21 ~~of Title 14 of the California Code of Regulations or a notice of~~  
 22 ~~intent pursuant to Section 1724.10 of Title 14 of the California~~  
 23 ~~Code of Regulations shall provide, as a part of the application or~~  
 24 ~~notice, a groundwater monitoring plan for review and approval by~~  
 25 ~~an appropriate regional water quality control board. The~~  
 26 ~~groundwater monitoring plan shall include, at a minimum, all of~~  
 27 ~~the following information:~~

28 ~~(1) The current water quality of the groundwater basin through~~  
 29 ~~which the well passes, that is sufficient to characterize the quality~~  
 30 ~~of the aquifer.~~

31 ~~(2) The current water quality of the injection zone sufficient to~~  
 32 ~~demonstrate that the injection zone is not suitable to be used as a~~  
 33 ~~source of drinking or irrigation water based on treatment~~  
 34 ~~technologies existing at the time of application or notice.~~

35 ~~(3) The identification of both public supply and domestic water~~  
 36 ~~wells located within one mile of the boundaries of the injection~~  
 37 ~~zone.~~

38 ~~(4) A demonstration that the proposed injection well is located~~  
 39 ~~in an area that is geologically suitable, including an appropriate~~  
 40 ~~confining and injection zone.~~

~~(5) Chemical and physical analyses of, and data regarding, identities and concentrations of all constituents present in the injected fluid or gas. Subdivision (j) of Section 3160 shall apply to a claim of trade secret for information described in this paragraph.~~

~~(6) Sites for monitoring wells that will allow for the detection of contamination or degradation associated with injection well operations during and after the period of its active use.~~

~~(7) (A) A schedule for monitoring and reporting data that provides groundwater quality data on a quarterly basis, at a minimum, during the active life of a well and at least annually after the well has been closed and abandoned.~~

~~(B) The data shall be submitted electronically to the State Water Resources Control Board for inclusion in the state board's geotracker database.~~

~~(8) An emergency plan that will be implemented in the case of a well failure or other event that has the potential to degrade groundwater.~~

~~(b) This section does not apply to a well if the appropriate regional water quality board has determined that the well meets both of the following:~~

~~(1) The well does not inject into, or pass through, an aquifer with a beneficial use.~~

~~(2) There are no public supply or domestic water wells located within one mile of the injection zone.~~

*SEC. 2. Article 2.5 (commencing with Section 3130) is added to Chapter 1 of Division 3 of the Public Resources Code, to read:*

*Article 2.5. Underground Injection Control*

*3130. For purposes of this article, the following terms mean the following:*

*(a) "Class II well" means a well that injects brine and other fluids associated with oil and gas production or a well that injects hydrocarbons for the purposes of storage.*

*(b) "Exempt aquifer" means an aquifer that has been proposed by the division and approved by the United States Environmental Protection Agency for exemption from the UIC program and meets the criteria for an aquifer exemption determination pursuant to*

1 *the federal Safe Drinking Water Act (42 U.S.C. Sec. 300f et seq.)*  
2 *and regulations implementing that act.*

3 (c) *“Project” means an underground injection or disposal*  
4 *project that uses a Class II well.*

5 (d) *“State board” means the State Water Resources Control*  
6 *Board.*

7 (e) *“UIC program” means a program covering Class II wells*  
8 *for which the division has received primacy from the United States*  
9 *Environmental Protection Agency pursuant to Section 1425 of the*  
10 *federal Safe Drinking Water Act (42 U.S.C. Sec. 300h-4).*

11 3131. (a) *Prior to proposing to the United States*  
12 *Environmental Protection Agency an aquifer as an exempt aquifer,*  
13 *the division shall do both of the following:*

14 (1) *Conduct a public hearing on the proposal.*

15 (2) *Submit the proposal to the state board for written*  
16 *concurrence.*

17 (b) *The state board may concur on the proposal if all of the*  
18 *following conditions are met:*

19 (1) *The division has included in the proposal all data necessary*  
20 *to meet the aquifer exemption criteria set forth in Section 146.4*  
21 *of Title 40 of the Code of Federal Regulations.*

22 (2) *The state board determines that the proposed aquifer cannot*  
23 *now, or will not in the future, serve as a source of drinking water*  
24 *or for other beneficial uses.*

25 (3) *The state board determines that injection into the proposed*  
26 *aquifer will stay in the proposed area and will not impact the*  
27 *ability of nearby nonexempt aquifers to be a source of drinking*  
28 *water or for other beneficial uses.*

29 3132. *The division shall review annually all projects approved*  
30 *pursuant to this chapter for compliance with applicable law.*

31 3133. *As a part of an application for approval of a project or*  
32 *as a part of the annual review conducted pursuant to Section 3132,*  
33 *the operator of the project shall submit to the state board or*  
34 *appropriate regional water quality control board for review and*  
35 *concurrence a groundwater monitoring plan meeting the*  
36 *requirements of Section 3134.*

37 3134. (a) *The groundwater monitoring plan required pursuant*  
38 *to Section 3133 shall include, at a minimum, all of the following:*

1 (1) Information demonstrating that the aquifer into which the  
2 injection occurs or the proposed injection will occur is an exempt  
3 aquifer.

4 (2) Information regarding the current water quality of the  
5 groundwater basin through which the well passes sufficient to  
6 characterize the quality of the aquifer.

7 (3) Information regarding the current water quality of the  
8 injection zone sufficient to demonstrate that the injection zone is  
9 not suitable to be used as a source of drinking or irrigation water  
10 based on treatment technologies existing at the time of submission  
11 of the plan.

12 (4) The identification of both public supply and domestic water  
13 wells located within one mile of the boundaries of the injection  
14 zone or evidence showing that there are no public supply or  
15 domestic water wells located within the one mile zone.

16 (5) A demonstration that the proposed injection well is located  
17 in an area that is geologically suitable, including an appropriate  
18 confining and injection zone.

19 (6) Chemical and physical analyses of, and data regarding,  
20 identities and concentrations of all constituents present in the  
21 injected fluid or gas. Subdivision (j) of Section 3160 shall apply  
22 to a claim of trade secret for information described in this  
23 paragraph.

24 (7) (A) Sites for monitoring wells that will allow for the  
25 detection of contamination or degradation associated with  
26 underground injection projects during and after the period of its  
27 active use.

28 (B) Sites for monitoring wells that demonstrate that the injection  
29 fluid is confined to the intended injection zone or zones of injection.

30 (8) (A) A schedule for monitoring and reporting data that  
31 provides, at a minimum, groundwater quality data on a quarterly  
32 basis during the active life of the well and at least annually after  
33 the well has been closed and abandoned.

34 (B) The data shall be submitted electronically to the state board  
35 for inclusion in the state board's geotracker database.

36 (9) An emergency plan that will be implemented in the case of  
37 a well failure or other event that has the potential to degrade  
38 groundwater.

39 (b) Subparagraph (A) of paragraph (7) of subdivision (a) does  
40 not apply to a well if the state board or appropriate regional water

1 *quality board has determined that the well meets both of the*  
2 *following:*

3 *(1) The well does not inject into, or pass through, an aquifer*  
4 *with a beneficial use.*

5 *(2) There are no public supply or domestic water wells located*  
6 *within one mile of the injection zone.*

7 *(c) (1) The state board or appropriate regional water quality*  
8 *control board may revise the monitoring plan to avoid duplication*  
9 *and assist with regional monitoring plans associated with oil and*  
10 *gas activities.*

11 *(2) The state board or appropriate regional water quality board*  
12 *may authorize the well operator to rely on a regional monitoring*  
13 *plan in lieu of the requirements of paragraphs (7) and (8) of*  
14 *subdivision (a).*

15 *SEC. 3. Section 3401 of the Public Resources Code is amended*  
16 *to read:*

17 3401. (a) The proceeds of charges levied, assessed, and  
18 collected pursuant to this article upon the properties of every person  
19 operating or owning an interest in the production of a well shall  
20 be used exclusively for the support and maintenance of the  
21 department charged with the supervision of oil and gas operations.

22 (b) Notwithstanding subdivision (a), the proceeds of charges  
23 levied, assessed, and collected pursuant to this article upon the  
24 properties of every person operating or owning an interest in the  
25 production of a well undergoing a well stimulation treatment, may  
26 be used by public entities, subject to appropriation by the  
27 Legislature, for all costs associated with both of the following:

28 (1) Well stimulation treatments, including rulemaking and  
29 scientific studies required to evaluate the treatment, inspections,  
30 any air and water quality sampling, monitoring, and testing  
31 performed by public entities.

32 (2) The costs of the State Water Resources Control Board and  
33 the regional water quality control boards in carrying out their  
34 responsibilities pursuant to Section 3160 and Section 10783 of the  
35 Water Code.

36 *(c) Notwithstanding subdivision (a), the proceeds of charges*  
37 *levied, assessed, and collected pursuant to this article upon the*  
38 *properties of every person operating or owning an interest in an*  
39 *injection or disposal well subject to Article 2.5 (commencing with*  
40 *Section 3130), may be used, subject to appropriation by the*

1 *Legislature, for all costs of the State Water Resources Control*  
2 *Board or appropriate regional water quality control board in*  
3 *carrying out their responsibilities pursuant to that article and*  
4 *Section 13227.5 of the Water Code.*

5 ~~SEC. 3.~~

6 SEC. 4. Section 13227.5 is added to the Water Code, to read:

7 13227.5. ~~A~~~~The state board or appropriate regional board,~~  
8 ~~with respect to its region,~~ board shall review and ~~approve~~ *may*  
9 *provide a written concurrence for a groundwater monitoring plan*  
10 *submitted pursuant to Section 3106.1 3133 of the Public Resources*  
11 *Code to ensure that groundwater quality is protected.*

12 ~~SEC. 4.~~

13 SEC. 5. No reimbursement is required by this act pursuant to  
14 Section 6 of Article XIII B of the California Constitution because  
15 the only costs that may be incurred by a local agency or school  
16 district will be incurred because this act creates a new crime or  
17 infraction, eliminates a crime or infraction, or changes the penalty  
18 for a crime or infraction, within the meaning of Section 17556 of  
19 the Government Code, or changes the definition of a crime within  
20 the meaning of Section 6 of Article XIII B of the California  
21 Constitution.