BOARD MEETING DATE: May 4, 2012 AGENDA NO. 25

PROPOSAL: Adopt Staff Recommendations to Support SB 1054 (Pavley) Oil

and Gas: Well Operation: Notice and AB 591 (Wieckowski) Oil

and Gas Production: Hydraulic Fracturing.

SYNOPSIS: SB 1054 (Pavley) would provide that the owner or operator of an

oil or gas well provide 20 days notice before a planned drilling operation. AB 591 (Wieckowski) would require that a supplier of hydraulic fracturing services furnish the owner or operator of an oil or gas well certain information regarding the chemicals used in hydraulic fracturing. The bill would also require the State Oil and Gas Supervisor to prepare an annual report on hydraulic fracturing

in the exploration and production of oil and gas resources.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:

Adopt staff recommendations to support the following state legislation:

- 1. SB 1054 (Pavley) Oil and gas: well operation: notice; and
- 2. AB 591 (Wieckowski) Oil and gas production: hydraulic fracturing.

Barry R. Wallerstein, D. Env. Executive Officer

OA:WS:MC

Background

"Hydraulic fracturing" or "fracking" of hydrocarbon wells to enhance oil and gas recovery is an increasingly used subsurface process/technique. Due to technological innovations, fracking, by itself and in combination with advanced drilling techniques (e.g. directional drilling and horizontal drilling) have allowed companies to develop previously uneconomic oil and gas reserves, such as those located in subsurface shale formations throughout the United States.

Once an oil or natural gas well is drilled and properly lined, fluids are pumped down to an isolated portion of the well at pressures high enough to cause or enlarge cracks in the subsurface shale formation. These cracks or fractures allow oil and natural gas to flow more freely into the well and then to the surface. The pumped fracking fluid is usually but not always - comprised almost entirely of water with a small fraction of additional substances (less than a few percent by volume) added to enhance the process. A considerable amount of water - hundreds of thousands to millions of gallons - may be needed to frack an individual well. The fluid volume needed, its chemical composition and physical characteristics will vary depending upon the particular conditions of each well.

For many years, fracking maintained a low profile in California. According to industry reports and academic papers, wells have been fracked for several decades. Estimates vary, but suggest that a considerable number of wells in the state may be fracked. Counties where wells have been fracked include Kern, Ventura, Santa Barbara, Los Angeles and Monterey. In the recent decade, fracturing technologies have improved to allow for horizontal drilling. Horizontal drilling provides the ability to tap deep shale plays that are shallow in depth, but have a wide area coverage. The ability to use horizontal drilling has led to a rapid expansion of natural gas extraction mainly in the midwest and the northeast United States. Fracking has become a highly controversial technique subject to considerable scrutiny given the need to dispose of large quantities of wastewater and the use of over 500 different chemicals, which some are considered carcinogenic.

Significant environmental contamination is attributed to fracking in cases in Wyoming, Texas, Colorado, West Virginia and Pennsylvania. New York State, for example, established a fracking moratorium until new regulations are developed, due, in part, to the potential risks to watersheds. Other states, including Texas, Colorado, Arkansas and Ohio have revised their laws and regulations to provide for additional safety and protective measures.

Since fracking of deep gas shales involves shooting high volumes of water and sand laced with chemicals deep underground, health concerns have primarily centered on fracking's impact on water supplies. But a recent three-year study by the Colorado School of Public Health indicated that air pollution may contribute to "acute and chronic health problems for those living near natural gas drilling sites."

In addition, the U.S. EPA is moving forward with a national study, due in 2014. However, U.S. EPA in mid-April issued regulations that for the first time will curtail air pollution from natural gas wells that use fracking. The regulations will limit emissions of volatile organic compounds, which react with sunlight to create smog. The rules also will curb carcinogens and methane, the main component of natural gas and a potent

contributor to climate change. The rules are expected to affect about 11,000 new wells annually that undergo fracking and an additional 1,200 that are re-fracked to boost production. The rules go into effect in 60 days, but the U.S. EPA gave the industry a three-year transition period to install technology to capture methane.

Much of the air pollution at gas sites escapes after the well is drilled but before it is linked to pipelines to take the gas to processing plants and closer to market. Methane is far more powerful than carbon dioxide as a greenhouse gas if it is simply vented into the air. Companies now burn methane, let it escape, or they capture and sell it as natural gas, a process referred to as "green completion." Nearly half of all companies that frack use green-completion technologies, according to U.S. EPA. Under the new rules, companies could burn, or flare, their methane for the next three years. By the start of 2015, all fracking sites will have to capture methane. Currently, Wyoming and Colorado are the only two states that require companies to use the green-completion process.

California is the fourth largest oil and gas producing state, and natural resources extraction is thus an important contributor to the state's economy. Within California's Department of Conservation, the Supervisor of the Division of Oil, Gas, and Geothermal Resources (DOGGR) has extensive and broad authority to regulate activities associated with the production and removal of hydrocarbons (e.g. oil and gas) from the ground (Public Resources Code (PRC) § 3106). This includes the subsurface injection of water and other fluids. This authority is granted in order to prevent damage to life, health, property, natural resources, and underground and surface water suitable for irrigation or domestic purposes.

At the April 12, 2012 Board Meeting, SB 1054 (Pavley) Oil and gas: well operation: notice and AB 591 (Wieckowski) Oil and gas production were discussed. The two bills are efforts to place greater transparency and public notice on fracking. Given the subject and timeliness of these pieces of legislation, Board members directed staff to bring these bills directly to the Board so that it may take a position with speed and authority.

Recommendation (Attachments 1 and 2)

Adopt Staff Recommendations to Support SB 1054 (Pavley) Oil and gas: well operation: notice and AB 591 (Wieckowski) Oil and gas production: hydraulic fracturing as per the attached analyses.

Attachments

- 1. Staff Analysis and Bill Language for SB 1054
- 2. Staff Analysis and Bill Language for AB 591

Attachment 1a

SB 1054 (Pavley) Oil and gas: well operation: notice.

Summary: This bill would extend the time that the State Oil and Gas Supervisor (Supervisor) has to reply to a request to begin drilling a well from 10 working days to 15 working days. This bill would also establish who should receive notice of well drilling and hydraulic fracturing operations and the timing of such notice. The bill would also require a well owner or operator to keep a history of the time periods that hydraulic fracturing treatments are performed.

Background: Before drilling a well, existing law requires the operator to file a written notice of intention to drill with the Supervisor or district deputy. Existing law provides that the notice is deemed approved if the Supervisor or district deputy fail to give a written response within 10 working days from the date of receipt. Existing law also mandates that a well owner or operator keep a careful and accurate history of the drilling of a well.

Status: 4/17/12 – Set for hearing on April 23, 2012 in Com. on E.Q.

Specific provisions: This bill would:

- Extend the allowed response time by the Supervisor to reply to a request to begin drilling a well from 10 working days to 15 working days.
- Require a well owner or operator to notify surface property owners and occupants and their municipal governments, among others, no less than 20 calendar days prior to planned drilling operations and the notice shall include information about the well and planned operations.
- Require a well owner or operator to notify the Supervisor or district deputy, surface property owners and occupants, and their municipal governments, among others, no less than 30 days prior to commencing hydraulic fracturing operations and the notice shall include information about the well and planned operations.
- Require a well owner or operator to provide to the Supervisor or district deputy
 a complete list of all recipients of the notice and a copy of the information
 provided in the notice no less than 10 calendar days prior to commencing
 drilling operations and no less than 20 calendar days prior to starting a hydraulic
 fracturing stimulation treatment.
- Require the Supervisor, beginning January 1, 2014, to submit to the Legislature an annual written report regarding the implementation of the new requirements.

Attachment 1a

• Require that the careful and accurate history of a well that a well owner or operator is required to keep, also include the time periods that hydraulic fracturing treatments are performed.

Impacts on AQMD'S Mission, Operations or Initiatives: The EPA reports air quality impacts in areas with active natural gas development have increased emissions of volatile organic compounds (VOCs), hazardous air pollutants, and methane, the main component of natural gas and a potent contributor to climate change. Further, the EPA recently issued regulations that for the first time will curtail air pollution from natural gas wells that use the controversial production technique known as hydraulic fracturing, or fracking. The regulations will limit emissions of VOC's, carcinogens and methane. Much of the air pollution at gas sites escapes after the well is drilled but before it is linked to pipelines to take the gas to processing plants and closer to market. A recent study by the Colorado School of Public Health indicated that air pollution may contribute to "acute and chronic health problems for those living near natural gas drilling sites."

This bill's provisions which provide for substantially more public notice regarding drilling and hydraulic fracturing operations is consistent with the goals and priorities of AQMD. This would allow the public and the AQMD to be better informed to combat the emissions that these wells produce within the South Coast region.

Recommended Position: Support

AMENDED IN SENATE APRIL 17, 2012 AMENDED IN SENATE MARCH 29, 2012

SENATE BILL

No. 1054

Introduced by Senator Pavley

February 9, 2012

An act to amend—Section Sections 3203 and 3213 of, and to add Sections 3203.1 and 3203.2 to, the Public Resources Code, relating to oil and gas.

LEGISLATIVE COUNSEL'S DIGEST

SB 1054, as amended, Pavley. Oil and gas: well operation: notice.

(1) Existing law requires, before commencing the work of drilling a well, the operator to file a written notice of intention to commence drilling with the State Oil and Gas Supervisor or district deputy. Existing law provides that the notice is deemed approved if the supervisor or the district deputy fails to give a written response to the notice within 10 working days from the date of receipt.

This bill would extend the response time by the supervisor from 10 working days to 15 working days.

The bill would also require the owner or operator to provide notice to, among others certain surface property owners and occupants no less than 20 calendar days prior to the planned drilling operations and would require the notice to include information about the well and the planned operations. The bill would require a well owner or operator to notify, among others, the supervisor or district deputy before commencing hydraulic fracturing operations.

The bill would also require the supervisor, beginning January 1, 2014, and on the 10th calendar day of each year thereafter, to submit to the

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Legislature an annual written report regarding the implementation of this notice requirement.

(2) Existing law requires the owner or operator of any well to keep a careful and accurate history of the drilling of the well.

This bill would require the history of the well to include the time period that hydraulic fracturing treatments are performed.

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

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

SECTION 1. Section 3203 of the Public Resources Code is amended to read:

3203. (a) The operator of any well, before commencing the work of drilling the well, shall file with the supervisor or the district deputy a written notice of intention to commence drilling. Drilling shall not commence until approval is given by the supervisor or the district deputy. If the supervisor or the district deputy fails to give the operator written response to the notice within 15 working days from the date of receipt, that failure shall be considered as an approval of the notice and the notice, for the purposes and intents of this chapter, shall be deemed a written report of the supervisor. If operations have not commenced within one year of receipt of the notice, the notice shall be deemed canceled. The notice shall contain the pertinent data the supervisor requires on printed forms supplied by the division or on other forms acceptable to the supervisor. The supervisor may require other pertinent information to supplement the notice.

- (b) After the completion of any well, this section also applies as far as may be, to the deepening or redrilling of the well, any operation involving the plugging of the well, or any operations permanently altering in any manner the casing of the well. The number or designation of any well, and the number or designation specified for any well in a notice filed as required by this section, shall not be changed without first obtaining a written consent of the supervisor.
- (c) If an operator fails to comply with an order of the supervisor, the supervisor may deny approval of proposed well operations until the operator brings its existing well operations into compliance with the order. If an operator fails to pay a civil penalty,

- remedy a violation that it is required to remedy to the satisfaction 2 of the supervisor pursuant to an order issued under Section 3236.5, 3 or pay any charges assessed under Article 7 (commencing with 4 Section 3400), the supervisor may deny approval of the operator's 5 proposed well operations until the operator pays the civil penalty, remedies the violation to the satisfaction of the supervisor, or pays 6 7 the charges assessed under Article 7 (commencing with Section 8 3400).
- SEC. 2. Section 3203.1 is added to the Public Resources Code. 10 to read:
 - 3203.1. (a) For the purposes of this section, "surface property owner" means the owner of a real property as shown on the latest equalized assessment roll or, if more recent information than the information contained on the assessment roll is available, the owner of record according to the county assessor or tax collector.
 - (b) (1) Not less than 20 calendar days prior to the planned start of drilling operations of a well, the well owner or operator shall notify all of the following:
 - (A) Every surface property owner or authorized agent of that owner, and every surface property occupant whose property line or place of residence is within a radius of 300 horizontal feet from the centerline of the planned vertical well-head at the surface.
 - (B) Every surface property owner or authorized agent of that owner, and every surface property occupant whose property line or place of residence is above any underground waters suitable for irrigation or domestic purposes that the well is reasonably anticipated to pierce.
 - (C) Every water supplier who uses any underground waters suitable for irrigation or domestic purposes that the well is reasonably anticipated to pierce.
 - (D) Every municipal government in which recipients of the notice pursuant to subparagraphs (A) and (B) are located.
 - (2) The notice shall be mailed or delivered. Notice to a municipal government, pursuant to subparagraph (D) of paragraph (1), may be provided electronically by prior written agreement.
 - (3) The notice shall include all of the following:
 - (A) The location of the well.

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- (B) The well identification number, if available.
- 39 (C) A description of the planned drilling operations 40 understandable to a layperson.

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1 (D) The time period when drilling operations are planned to 2 occur.

- (E) Instructions on how to obtain additional information on the status of drilling operations from the well owner or operator.
 - (F) The contact information for the district deputy.
- (G) Information on how to obtain additional information on the well from the division, including well log data.
- (4) The well owner or operator shall provide to the supervisor or district deputy a complete list of all recipients of the notice and a copy of the information provided in the notice required pursuant to this subdivision, in no less than 10 calendar days prior to commencing drilling operations.
- (5) The well owner or operator shall notify all recipients of the notice required, pursuant to this subdivision, if the drilling operations do not occur during the proposed time period.
- (c) A well owner or operator who complies with this section is deemed to be in compliance with the notice requirement pursuant to Section 848 of the Civil Code.
- SEC. 3. Section 3203.2 is added to the Public Resources Code, to read:
- 3203.2. (a) For the purposes of this section, the following definitions apply:
- (1) "Surface property owner" means the owner of a real property as shown on the latest equalized assessment roll or, if more recent information than the information contained on the assessment roll is available, the owner of record according to the county assessor or tax collector.
- (2) "Hydraulic fracturing" or "fracking" means a well stimulation treatment that includes the application of hydraulic fracturing fluids under pressure into an underground geologic formation to create or propagate fractures in the formation, thereby stimulation treatment that typically includes the pressurized injection of water and other materials into an underground geologic formation in order to create or propagate fractures in the formation, thereby or with the intent of causing or improving the production of oil or gas from a well.
- (b) (1) Thirty calendar days prior to the commencement of hydraulic fracturing operations on a well, the well owner or operator shall notify all of the following:
 - (A) The supervisor or district deputy.

- (B) Every surface property owner or authorized agent of the owner, and every surface property occupant whose property line or place of residence is within a radius of 300 horizontal feet from the centerline of the vertical well-head at the surface or a distance of 300 feet in any direction from the horizontal projection of the subsurface portion of the designated well to the surface.
- (C) Every surface property owner or authorized agent of the owner, and every surface property occupant whose property line or place of residence is above any underground waters suitable for irrigation or domestic purposes that the well pierces.
- (D) Every water supplier who uses any underground waters suitable for irrigation or domestic purposes that the well pierces.
- (E) Every municipal government in which recipients of the notice pursuant to subparagraphs (B) and (C) are located.
- (2) The notice shall be mailed or delivered. Notice to the division, pursuant to subparagraph (E) of paragraph (1), may be provided electronically by prior written agreement.
- (3) The well owner or operator shall provide notice to all of the following:
 - (A) The location of the well.

- (B) The well identification number.
- (C) A description of the planned fracking well stimulation technique understandable to a layperson.
- (D) The time period when fracking well stimulation is planned to occur.
- (E) Instructions on how to obtain additional information on the status of drilling operations from the well owner or operator.
 - (F) The contact information for the district deputy.
- (G) Information on how to obtain additional information on the well, including well log data.
- (4) The well owner or operator shall provide to the supervisor or district deputy a complete list of all recipients of the notice *and* a copy of the information provided in the notice required pursuant to this subdivision, in no less than 20 calendar days prior to starting a hydraulic fracturing stimulation treatment.
- (5) The well owner or operator shall notify all recipients of the notice required pursuant to this subdivision if the hydraulic fracturing well stimulation treatment does not occur during the proposed time period.

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(6) The well owner or operator shall add the actual time period of the hydraulic fracturing well stimulation treatment to the records contained in the well-log *drilling history* pursuant to Section-3210 3213 and report it accordingly.

- (c) Wells and well operations subject to Section 3234 are not exempt from the notification requirements under subdivision (b).
- (c) A well owner or operator who complies with this Section is deemed to be in compliance with the notice requirement pursuant to Section 848 of the Civil Code.
- (d) Beginning January 1, 2014, and no later than the 10th calendar day of each year *thereafter*, the supervisor shall submit to the Legislature a written report on the operation of, effectiveness of, and the extent of *describing* compliance with this section, in order to evaluate compliance and the regulatory burden imposed. The report shall include the total number of notices issued, the number of wells with notices, and any additional information necessary to interpret the results. *The report shall be submitted in compliance with Section 9795 of the Government Code*.
- 19 SEC. 4. Section 3213 of the Public Resources Code is amended 20 to read:
 - 3213. The history shall show the location and amount of sidetracked casings, tools, or other material, the depth and quantity of cement in cement plugs, the shots of dynamite or other explosives, and the results of production and other tests during drilling operations. The history shall include the time period that hydraulic fracturing treatments are performed.

South Coast Air Quality Management District Legislative Analysis Summary – AB 591 (Wieckowski)

Version: As Amended April 9, 2012

Analyst: PC

Attachment 2a

AB 591 (Wieckowski) Oil and gas production: hydraulic fracturing. California Fracturing Disclosure Act of 2012

Summary: This bill would require a hydraulic fracturing services supplier to disclose information, including a list of chemicals used in hydraulic fracturing, to be posted to a Chemical Disclosure Registry and internet maps on a public website. AB 591 also would require the preparation of an annual report for the Legislature on hydraulic fracturing in the exploration and production of oil and gas resources in California.

Background: Under existing law, the Division of Oil, Gas, and Geothermal Resources (the Division) in the Department of Conservation regulates the drilling, operation, maintenance, and abandonment of oil and gas wells and tanks in the state. Well operators are required to report information periodically to the Division. Until recently, the federal Environmental Protection Agency (EPA) sets standards relating to the injection of liquid below ground, but not for injections used to hydraulically fracture rock strata. Under the process of hydraulic fracturing, well operators pump water and a variety of chemicals into wells at very high pressure. This causes cracks to form or grow in the rock strata, allowing more oil or gas to flow into the well and then to the surface.

Existing law also provides that within 60 days after the date of cessation of drilling, rework, or abandonment operations, the owner or operator of a well is required to file with the district deputy certain information, including the history of work performed.

Status: 4/10/12 – Withdrawn from committee. Re-referred to Committee on RLS.

Specific Provisions: The bill intends to let the state and the public know when and where hydraulic fracturing is occurring and what chemicals are being used. Specifically, this bill would:

• Require a hydraulic fracturing services supplier to furnish to the owner or operator of a well certain information, including a list of chemicals used in hydraulic fracturing, unless protected as a trade secret. The owner or operator would then be required to post the information on a Chemical Disclosure Registry and add this information to existing internet maps on the Divisions's internet web site.

South Coast Air Quality Management District Legislative Analysis Summary – AB 591 (Wieckowski)

Version: As Amended April 9, 2012

Attachment 2a

Analyst: PC

- Require a person asserting trade secret protection as a basis for nondisclosure to submit to the State Oil & Gas Supervisor for the California Department of Conservation's Division of Oil, Gas, and Geothermal Resources (Supervisor) specified information under the penalty of perjury.
- Require the Supervisor on or before January 1, 2013, and annually thereafter, to
 prepare and transmit to the Legislature a comprehensive report on hydraulic
 fracturing in the exploration and production of oil and gas resources in California.

Impacts on AQMD's mission, Operation, or Initiatives: The EPA reports air quality impacts in areas with active natural gas development have increased emissions of volatile organic compounds (VOCs), hazardous air pollutants, and methane, the main component of natural gas and a potent contributor to climate change. Similarly, a recent study by the Colorado School of Public Health indicated that air pollution may contribute to "acute and chronic health problems for those living near natural gas drilling sites."

This bill's requirements to make the information regarding hydraulic fracturing in the exploration and production of oil and gas resources in California, and the specific chemicals used in the process, accessible to the public would be consistent with the goals and priorities of AQMD. This would allow the public and the AQMD to be better equipped to combat the emissions that these wells produce within the South Coast region.

Recommended Position: Support

Attachment 2b

AMENDED IN SENATE APRIL 9, 2012

AMENDED IN SENATE JULY 7, 2011

AMENDED IN ASSEMBLY MAY 27, 2011

AMENDED IN ASSEMBLY MAY 10, 2011

AMENDED IN ASSEMBLY APRIL 12, 2011

CALIFORNIA LEGISLATURE—2011–12 REGULAR SESSION

ASSEMBLY BILL

No. 591

Introduced by Assembly Member Wieckowski (Principal coauthor: Assembly Member Dickinson) (Coauthor: Assembly Member Allen)

February 16, 2011

An act to amend Sections 3210, 3213, and 3215 of, and to add Section 3017 3213.5 to, the Public Resources Code, relating to oil and gas production.

LEGISLATIVE COUNSEL'S DIGEST

AB 591, as amended, Wieckowski. Oil and gas production: hydraulic fracturing.

Under existing law, the Division of Oil, Gas, and Geothermal Resources in the Department of Conservation regulates the drilling, operation, maintenance, and abandonment of oil and gas wells in the state. The State Oil and Gas Supervisor supervises the drilling, operation, maintenance, and abandonment of wells and the operation, maintenance, and removal or abandonment of tanks and facilities related to oil and gas production within an oil and gas field regarding safety and environmental damage. Existing law requires the owner or operator of

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a well to keep, or cause to be kept, a careful and accurate log, core record, and history of the drilling of the well. Within Existing law also provides that within 60 days after the date of cessation of drilling, rework, or abandonment operations, the owner or operator of a well is required to file with the district deputy certain information, including the history of work performed.

This bill would define "hydraulic fracturing" and require a person carrying out hydraulic fracturing on behalf of an owner or operator at a well to provide to the owner or operator a list of the chemical constituents used in the hydraulic fracturing fluid and the amount of water and hydraulic fracturing fluid recovered from the well. The bill would additionally require the history of the drilling of the well to include certain information regarding the amount and source of water used in the exploration or production from the well and the radiological components or tracers injected into the well. The bill would also require the history to include, if hydraulic fracturing was used at the well, a complete list of the chemicals used in the hydraulic fracturing and the amount and disposition of water and hydraulic fracturing fluid recovered from the well.

The bill would require a supplier, as defined, of hydraulic fracturing services to furnish to the owner or operator to submit to the supervisor, certain information, including information regarding the chemicals used in hydraulic fracturing, who would be required unless protected as a trade secret. The bill would require the owner or operator to post the information on a Chemical Disclosure Registry and to add this information to existing Internet maps on the division's Internet Web site and to make this information available to the public. The bill would require a person asserting trade secret protection as a basis for nondisclosure to submit to the supervisor specified information under the penalty of perjury. Because the bill would create a new crime, this bill would impose a state-mandated local program.

This bill would require the State Oil and Gas Supervisor on or before January 1, 2013, and annually thereafter, to prepare and transmit to the Legislature a comprehensive report on hydraulic fracturing in the exploration and production of oil and gas resources in California.

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: no-yes.

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

SECTION 1. This act shall be known, and may be cited, as the 1 2 California Fracturing Disclosure Act of 2012.

SECTION 1.

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- SEC. 2. The Legislature finds and declares all of the following:
- (a) Hydraulic fracturing is a technique used in the production of oil and gas that involves the pressurized injection of water and a mix of chemicals into an underground geologic formation in order to fracture the formation, thereby causing or enhancing the production of oil or gas from a well.
- (b) Hydraulic fracturing has been used in California for several decades to extract oil and gas and is likely to be used more extensively as the industry seeks to develop additional oil- and gas-bearing formations.
- (c) The Division of Oil, Gas, and Geothermal Resources in the Department of Conservation, which has the obligation to protect public health and the resources of the state, including groundwater resources, has the authority to regulate all oil and natural gas drilling in the state, but currently does not require the disclosure of pertinent information regarding hydraulic fracturing or ascertain what specific types of production and exploration are taking place at permitted wells.
- (d) Given California's geologic, seismic complexity, and finite and significantly compromised water resources, it is important to collect basic information about natural resource production processes. The state and the public should know when and where hydraulic fracturing is occurring and what chemicals are being used in the process.
- SEC. 2. Section 3017 is added to the Public Resources Code, to read:
- 3017. "Hydraulic fracturing" means a technique used in preparing a well that typically involves the pressurized injection of water and a mix of chemicals, compounds, and materials into an underground geologic formation in order to fracture the

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1 formation, thereby causing or enhancing, for the purposes of this division, the production of oil or gas from a well.

- SEC. 3. Section 3210 of the Public Resources Code is amended to read:
- 3210. (a) The owner or operator of any well shall keep, or eause to be kept, a careful and accurate log, core record, and history of the drilling of the well.
- (b) A person carrying out hydraulic fracturing on behalf of an owner or operator at a well shall provide to that owner or operator a complete list of the chemical constituents used in the hydraulic fracturing fluid and each chemical's associated Chemical Abstracts Service (CAS) numbers, for the purposes of accurately and completely maintaining the well's log, history, and core record, and ensuring compliance with the disclosure requirements of this article.
- (c) A person carrying out hydraulic fracturing on behalf of an owner or operator at a well shall provide to that owner or operator the amount and disposition of water and hydraulic fracturing fluid recovered from each well prior to the reporting of the water produced pursuant to Section 3227, for the purposes of accurately and completely maintaining the well's log, history, and core record, and ensuring compliance with the disclosure requirements of this article.
- SEC. 4. Section 3213 of the Public Resources Code is amended to read:
- 3213. (a) The history of the drilling of the well shall show all of the following:
- (1) The location and amount of sidetracked casings, tools, or other material, the depth and quantity of cement in cement plugs, the shots of dynamite or other explosives, and the results of production and other tests during drilling operations.
- (2) The amount and source of water used in the exploration of or production from the well, which shall be updated annually.
- (3) Any radiological components or tracers injected into the well and a description of the recovery method, if any, for those components or tracers, the recovery rate, and the disposal method for recovered components or tracers.
- 38 (b) If hydraulic fracturing was used at the well, the history of the drilling of the well shall also include both of the following:

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- (1) A complete list of the chemicals used in the hydraulic fracturing. This list shall include the names of all of the chemicals used and their Chemical Abstracts Service (CAS) numbers.
- (2) The amount and disposition of water and hydraulic fracturing fluid recovered from each well prior to the reporting of the water produced pursuant to Section 3227.
- SEC. 3. Section 3213 of the Public Resources Code is amended to read:
- 3213. The history shall show the location and amount of sidetracked casings, tools, or other material, the depth and quantity of cement in cement plugs, the shots of dynamite or other explosives, and the results of production and other tests during drilling operations, and the information required pursuant to Section 3213.5.
- SEC. 4. Section 3213.5 is added to the Public Resources Code. to read:
- 3213.5. (a) As used in this section, the following terms have the following meanings:
- (1) "Additive" means a chemical substance or combination of substances, including chemicals and proppants intentionally added to the base fluid for purposes of preparing a hydraulic fracturing fluid for treatment of a well.
- (2) "Base fluid" means the continuous phase fluid type, such as water, used in a hydraulic fracturing treatment.
- (3) "Carrier fluid" means a base fluid, such as water, into which additives are mixed to form the hydraulic fracturing fluid.
- (4) "Chemical" means an element or chemical compound, or mixture of elements or compounds that has its own specific name or identity such as a Chemical Abstracts Service number, whether or not the chemical is subject to the requirements of Section 1910.1200(g)(2) of Title 29 of the Code of Federal Regulations.
- (5) "Chemical Abstracts Service" means the division of the American Chemical Society that is the globally recognized authority for information on chemical substances.
- (6) "Chemical Abstracts Service (CAS) number" means the unique identification number assigned to a chemical by the Chemical Abstracts Service.
- (7) "Chemical Disclosure Registry" means the chemical registry Internet Web site known as fracfocus.org developed by the Ground 40 Water Protection Council and the Interstate Oil and Gas Compact

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Commission. If that Internet Web site becomes permanently inoperable, then "Chemical Disclosure Registry" shall mean another publicly accessible information Internet Web site that is designated by the Division of Oil, Gas and Geothermal Resources.

- (8) "Chemical family" means a group of chemicals that share similar chemical properties and have a common general name.
- (9) "Health professional" means a physician, physician assistant, nurse practitioner, registered nurse, or emergency medical technician licensed by the State of California.
- (10) "Hydraulic fracturing" is a well stimulation treatment that includes the application of hydraulic fracturing fluids into an underground geologic formation to create or propagate fractures in the formation, thereby causing or improving the production of oil or gas from a well.
- (11) "Hydraulic fracturing fluids" include a carrier fluid mixed with physical and chemical additives for the purpose of hydraulic fracturing. The additives may, but are not required to, serve additional purposes beyond the transmission of hydraulic pressure to the geologic formation. Additives may be of any phase.
- (12) "Proppants" are materials inserted or injected into the formation that are intended to prevent newly created or enhanced fractures from closing.
- (13) "Supplier" means an entity performing hydraulic fracturing or a person supplying an additive or proppant directly to the operator for use in hydraulic fracturing.
- (b) If hydraulic fracturing is performed on a well, a supplier who performs any part of hydraulic fracturing or provides additives directly to the operator for hydraulic fracturing shall, with the exception of information claimed to be a trade secret pursuant to subdivision (f), furnish the operator with information needed for the operator to comply with subdivision (c). That information shall be provided as soon as possible but no later than 30 days following the conclusion of the hydraulic fracturing.
- (c) If hydraulic fracturing is performed on a well, an owner or operator of the well shall post within 60 days following the cessation of hydraulic fracturing, or shall arrange with the supplier to post, to the Chemical Disclosure Registry all the following information that is not claimed as a trade secret pursuant to subdivision (f):
 - (1) The name of the owner or operator of the well.

- 1 (2) The date of the hydraulic fracturing.
- *(3) The county in which the well is located.*
- 3 (4) The API number for the well.
- 4 (5) The well name and number.

- 5 (6) The longitude and latitude of the wellhead.
 - (7) The true vertical depth of the well.
 - (8) A complete list of the names, CAS numbers, and maximum concentration, in percent by mass, of each chemical intentionally added to the hydraulic fracturing fluid. Where the CAS number does not exist for a chemical, the operator or supplier may provide another unique identifier where available.
 - (9) The trade name, supplier, and a brief description of the intended purpose of each additive contained in the hydraulic fracturing fluid.
 - (10) The total volume of carrier fluid used during hydraulic fracturing, identifying whether it is water suitable for irrigation or domestic purposes, water not suitable for irrigation or domestic purposes, or something other than water.
 - (11) The disposition of the carrier fluid used to conduct hydraulic fracturing.
 - (12) Any radiological components or tracers injected into the well as part of the hydraulic fracturing process, a description of the recovery method, if any, for those components or tracers, the recovery rate and the disposal method for recovered components or tracers.
 - (d) The owner or operator of a well is not responsible for inaccuracy in information that is provided by a supplier.
 - (e) The owner or operator may request, in writing, that the information required in this article be considered confidential information pursuant to Section 3234.
 - (f) (1) Owners, operators, and suppliers are not required to disclose trade secrets to the division, and may withhold from disclosure under this section information that is subject to a claim of trade secret protection.
 - (2) (A) An owner, operator, or supplier who withholds information from the division shall, at the time of posting information to the Chemical Disclosure Registry pursuant to subdivision (c), submit to the supervisor a claim of entitlement form stating that the information specified pursuant to paragraph (3) was withheld as protected trade secret information, as defined

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in subdivision (d) of Section 3426.1 of the Civil Code, or paragraph (9) of subdivision (a) of Section 499c of the Penal Code.

- (B) On a form approved by the supervisor, an owner, operator, or supplier shall identify, by category, the information withheld as protected trade secret information. The form or any attachment to the form shall not require trade secret information. The form shall include all of the following:
- (i) The name, mailing address, and phone number of the owner, operator, supplier, or authorized representative with respect to trade secrecy claims. If the information changes, the claimant shall submit an updated form to the supervisor within 30 days.
- (ii) The chemical family or similar descriptor for the chemical, if the information withheld includes the identity of a chemical.
- (iii) A requirement that the owner, operator, or supplier affirm or otherwise address, and provide specific information regarding, the following: (I) that the holder of the trade secret information has not disclosed it to another person, other than a member of a local emergency planning committee, an officer or employee of the United States or a state or local government, an employee of those entities, or a person who is bound by a confidentiality agreement, and that person has taken reasonable measures to protect the confidentiality of the information and intends to continue to take measures, or disclosure has otherwise been limited so that the information is not readily available to competitors, (II) the information is not required to be disclosed, or otherwise made available, to the public under any other federal or state law, (III) disclosure of the information would harm the competitive position of the disclosing entity, and (IV) the information is not readily discoverable through reverse engineering.
- (iv) A certification by the submitter declaring under penalty of perjury that the claim of entitlement form has been completed and the information contained therein is true, correct, and complete to the best of the declarant's knowledge.
- (3) Information withheld from disclosure under subdivision (b) or (c) shall be replaced with text signifying that it has been withheld as trade secret information, except that the specific name of a constituent that is claimed as trade secret information shall be replaced with the chemical family or similar descriptor associated with the trade secret constituent.

- (4) Information contained in the form may be made available to the public in accordance with Section 3215 or upon request by a member of the public pursuant to Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code.
- (5) The owner, operator, or supplier claiming a trade secret entitlement is required to provide the trade secret information to the supervisor upon receipt of a letter from the supervisor stating that the information is necessary to respond to a spill, release, or complaint from a person who may have been directly and adversely affected or aggrieved by such spill or release. The information disclosed to the supervisor shall be considered confidential and not a public record for purposes of Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code.
- (6) This section does not prohibit the exchange of properly designated trade secrets between public agencies who have lawful jurisdiction for either enforcement action or emergency response, to the extent that such disclosure is necessary to allow the agencies to respond to a spill, release, or complaint, provided that the agencies in receipt of the information shall not disseminate it further. Employees who receive a trade secret from the division shall maintain the confidentiality of the trade secret and destroy all copies of the trade secret received once the need for the trade secret has ended. A trade secret received shall not be considered a public record for purposes of Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code.
- (7) This section does not prohibit the release of properly designated trade secrets to a health professional who requests the trade secret in writing, if the health professional provides a written statement of need for the trade secret to treat injuries caused by spills or releases and executes a confidentiality agreement developed by the supervisor.
- (A) The health professional may not use the trade secret for purposes other than is described in the statement of need. The trade secret shall not be considered a public record for purposes of Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code.
- (B) The confidentiality agreement shall state that (i) the trade secret is needed for purposes of diagnosis or treatment of an individual, (ii) the individual being diagnosed may have been exposed to the chemical concerned as a result of a spill or release,

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and (iii) knowledge of the trade secret will assist in such diagnosis or treatment.

- (C) Where a health professional determines that a medical emergency exists and the trade secret information is necessary for emergency treatment, the owner, operator, or supplier shall immediately disclose the information to the health professional on verbal acknowledgment that the trade secret information shall not be used for any purpose other than health needs and that the health professional will otherwise maintain the information as confidential. The owner, operator, or supplier may request a written statement of need and confidentiality agreement from the health professional as soon as circumstances permit.
- (8) This section does not supersede or change the disclosure of information pursuant to the California Occupational Safety and Health Act, the California Hazardous Material Release Response Plans and Inventory statute, the Porter-Cologne Water Quality Control Act, or any other state or federal act allowing the disclosure of chemical information.
- (g) (1) Whenever it appears that any person is violating or threatening to violate any provision of this section relating to the disclosure of the constituents of hydraulic fracturing fluids, the supervisor may bring suit against the person in the superior court of any county where the violation occurs or is threatened to restrain the person from continuing the violation or from carrying out the threat of violation. Upon the filing of the suit, summons issued to the person may be directed to the sheriff or his or her deputies. In the suit, the court has jurisdiction to grant to the supervisor any final prohibitory and mandatory injunctions that the facts warrant.
- (2) If the supervisor fails to bring suit to enjoin a violation or threatened violation of any provision of this section relating to the disclosure of the constituents of hydraulic fracturing fluids, or any rule, regulation, or order of the supervisor within 30 days after receipt of written request to do so by any person who is or will be adversely affected by the violation, the person making the request may bring suit in the person's own behalf to restrain the violation or threatened violation in any court in which the supervisor might have brought suit. If in the suit, the court holds that injunctive relief should be granted, the supervisor shall be made a party and shall be substituted for the person who brought the suit, and the

injunction shall be issued as if the supervisor had at all times been the plaintiff.

- (3) A civil action for damages shall not lie against any person for the violation of this section or any rule, regulation, or order of the supervisor issued to implement or enforce this section. If the supervisor brings a suit or action pursuant to paragraph (1), a defendant or intervenor shall not cross-complain or otherwise bring an action in the same proceeding against any other person for damages or for any other purpose.
- SEC. 5. Section 3215 of the Public Resources Code is amended to read:
- 3215. (a) Within 60 days after the date of cessation of drilling, rework, hydraulic fracturing, or abandonment operations, or the date of suspension of operations, the owner or operator shall file with the district deputy, in the form approved by the supervisor, true copies of the log, core record, and history of work performed, and, if made, true and reproducible copies of all electrical, physical, or chemical logs, tests, or surveys. Upon a showing of hardship, the supervisor may extend the time within which to comply with this section for a period not to exceed 60 additional days.
- (b) The owner or operator shall also submit to the supervisor information provided in the history pursuant to subdivision (b) of Section 3213 and the supervisor shall add this information to existing Internet maps on the division's Internet Web site, and make the information available to the public in such a way that the list of chemicals is associated with each specific well where those chemicals were injected.
- (b) The supervisor shall add information provided pursuant to subdivision (c) of Section 3213.5 and not claimed as a trade secret to existing Internet maps on the division's Internet Web site, and make the nontrade secret information available to the public in such a way that the information is associated with each specific well where those chemicals were used. For the purpose of complying with this subdivision, the supervisor may use the Chemical Disclosure Registry if the following conditions are met:
- (1) The information on the existing public Internet Web site specific to California wells is originally transmitted to the public Internet Web site and posted in a form and manner approved by the supervisor and includes the information required by subdivision (c) of Section 3213.5 that is not claimed as a trade secret.

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(2) There is an electronic link from the wells represented on the division's existing Internet maps that allows members of the public to view the information about specific wells based on their location.

- (3) On and after January 1, 2013, the Chemical Disclosure Registry allows for the division staff and the public to search and sort the registry for information by geographic area, ingredient, Chemical Abstract Service number, time period, and operator.
- (c) On or before January 1, 2013, and annually thereafter, the supervisor shall prepare and transmit to the Legislature a comprehensive report on hydraulic fracturing in the exploration and production of oil and gas resources in California using the data provided pursuant to subdivision (b) of Section 3213. 3213.5. The report also shall include relevant additional information, as necessary, including, but not limited to, the disposition of water used in the process. all the following:
- (1) Aggregated data detailing the volumes of carrier fluid used during hydraulic fracturing, identifying whether it is water suitable for irrigation or domestic purposes, water not suitable for irrigation or domestic purposes, or something other than water.
- (2) Aggregated data detailing the disposition of carrier fluid used to conduct hydraulic fracturing.
- (3) Aggregated data detailing the volumes of each chemical used in hydraulic fracturing in the state, in each county, and by each company during the preceding year.
- (4) The number of wells granted confidentiality for hydraulic fracturing information under Section 3234.
 - (5) The number of emergency responses to a spill or release.
- (6) Based on a representative sampling of Chemical Disclosure Registry forms submitted to the division pursuant to subdivision (c) of Section 3213.5, the percentage of chemical information withheld within the representative sample as trade secret information pursuant to subdivision (f) of Section 3213.5.
- (d) A report to be submitted pursuant to subdivision (c) shall be submitted in compliance with Section 9795 of the Government Code.
- SEC. 6. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty

Attachment 2b

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- 1 for a crime or infraction, within the meaning of Section 17556 of
- 2 the Government Code, or changes the definition of a crime within
- 3 the meaning of Section 6 of Article XIIIB of the California
- 4 Constitution.

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