Senate Bill No. 4

CHAPTER 313

An act to amend Sections 3213, 3215, 3236.5, and 3401 of, and to add Article 3 (commencing with Section 3150) to Chapter 1 of Division 3 of, the Public Resources Code, and to add Section 10783 to the Water Code, relating to oil and gas.

[Approved by Governor September 20, 2013. Filed with Secretary of State September 20, 2013.]

LEGISLATIVE COUNSEL'S DIGEST

SB 4, Pavley. Oil and gas: well stimulation.

(1) Under existing law, the Division of Oil, Gas, and Geothermal Resources in the Department of Conservation, or the division, regulates the drilling, operation, maintenance, and abandonment of oil and gas wells in the state. The State Oil and Gas Supervisor, or 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 an operator of a well, before commencing the work of drilling the well, to obtain approval from the supervisor or district deputy. Existing law requires the owner or operator of 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 60 days after the date of cessation of drilling, rework, or abandonment operations, the owner or operator is required to file with the district deputy certain information, including the history of work performed. Under existing law, a person who violates any prohibition specific to the regulation of oil or gas operations is guilty of a misdemeanor.

This bill would define, among other things, the terms well stimulation treatment, hydraulic fracturing, and hydraulic fracturing fluid. The bill would require the Secretary of the Natural Resources Agency, on or before January 1, 2015, to cause to be conducted, and completed, an independent scientific study on well stimulation treatments, including acid well stimulation and hydraulic fracturing treatments. The bill would require an owner or operator of a well to record and include all data on acid treatments and well stimulation treatments, as specified. The bill would require the division, in consultation with the Department of Toxic Substances Control, the State Air Resources Board, the State Water Resources Control Board, the Department of Resources Recycling and Recovery, and any local air districts and regional water quality control boards in areas where well stimulation treatments may occur, on or before January 1, 2015, to adopt rules and regulations specific to well stimulation, including governing the construction

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of wells and well casings and full disclosure of the composition and disposition of well stimulation fluids, and would authorize the division to allow well stimulation treatments if specific conditions are met. The bill would require an operator to apply for a permit, as specified, with the supervisor or district deputy, prior to performing a well stimulation treatment of a well and would prohibit the operator from either conducting a new well stimulation treatment or repeating a well stimulation treatment without a valid, approved permit. The bill would prohibit the approval of a permit application that is incomplete. The bill would require the division, within 5 business days of issuing a permit to commence a well stimulation treatment, to provide a copy to specific boards and entities and to post the permit on a publicly accessible portion of its Internet Web site. The bill would provide that the well stimulation treatment permit expires one year from the date that a permit is issued. The bill would require the division to perform random periodic spot check inspections during well stimulation treatments, as specified. The bill would require the Secretary of the Natural Resources Agency to notify various legislative committees on the progress of the independent scientific study on well stimulation and related activities, as specified, until the study is completed and peer reviewed by independent scientific experts. The bill would require the operator to provide a copy of the approved well stimulation treatment permit to specified tenants and property owners at least 30 days prior to commencing a well stimulation treatment. The bill would require the operator to provide notice to the division at least 72 hours prior to the actual start of a well stimulation treatment in order for the division to witness the treatment. The bill would require the supplier, as defined, of the well stimulation treatment to provide to the operator, within 30 days following the conclusion of the treatment, certain information regarding the well stimulation fluid. The bill would require the operator, within 60 days of the cessation of a well stimulation treatment, to post or cause to have posted on an Internet Web site accessible to the public specified information on the well stimulation fluid, as specified. The bill would require the division to commence a process to develop an Internet Web site for operators to report specific information related to well stimulation treatments and would require the Internet Web site to be operational no later than January 1, 2016. The bill would authorize the division to direct reporting to an alternative Internet Web site, as prescribed, and would require the division to obtain the data reported to the alternative Internet Web site and make it available to the public, as specified. The bill would provide that where the division shares jurisdiction over a well with a federal entity, the division's rules and regulations apply in addition to all applicable federal law and regulations. The bill would require a supplier claiming trade secret protection for the chemical composition of additives used in a well stimulation treatment to disclose the composition to the division, in conjunction with a well stimulation treatment permit application, as specified, but would, with certain exceptions, prohibit those with access to the trade secret from disclosing it. Because this bill would create a new crime, it would impose a state-mandated local program.

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(2) Under existing law, a person who violates certain statutes or regulations relating to oil and gas well operations is subject to a civil penalty not to exceed \$25,000 for each violation.

This bill would make persons who violate specified provisions relating to well stimulation treatments subject to a civil penalty of not less than \$10,000 and not to exceed \$25,000 per day per violation.

(3) Existing law imposes an annual charge upon each person operating or owning an interest in an oil or gas well in respect to the production of the well which charge is payable to the Treasurer for deposit into the Oil, Gas, and Geothermal Administrative Fund. Existing law further requires that specific moneys from charges levied, assessed, and collected upon the properties of every person operating or owning an interest in the production of a well to be used exclusively, upon appropriation, for the support and maintenance of the department charged with the supervision of oil and gas operations.

This bill would allow the moneys described above to be used for all costs associated with (A) well stimulation treatments, including scientific studies required to evaluate the treatment, inspections, and any air and water quality sampling, monitoring, and testing performed by public entities, and (B) the costs of the State Water Resources Control Board and the regional water quality control boards in carrying out specific responsibilities relating to well stimulation and groundwater monitoring, as specified.

This bill would require the supervisor, on or before January 1, 2016, and annually thereafter, to transmit to the Legislature and make available publicly a comprehensive report on well stimulation in the exploration and production of oil and gas resources in the state.

(4) Existing law, the Groundwater Quality Monitoring Act of 2001, requires the State Water Resources Control Board to integrate existing monitoring programs and design new program elements, as necessary, to establish a comprehensive monitoring program capable of assessing each groundwater basin in the state through direct and other statistically reliable sampling approaches.

This bill would require the state board, on or before July 1, 2015, to develop a groundwater monitoring model criteria, as specified, to be implemented either on a well-by-well basis or on a regional scale, on how to conduct appropriate monitoring on individual oil and gas wells subject to a well stimulation treatment in order to protect all waters designated for beneficial uses and prioritize the monitoring of groundwater that is or has the potential to be a source of drinking water.

(5)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.

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

SECTION 1. The Legislature finds and declares all of the following:

- (a) The hydraulic fracturing of oil and gas wells in combination with technological advances in oil and gas well drilling are spurring oil and gas extraction and exploration in California. Other well stimulation treatments, in addition to hydraulic fracturing, are also critical to boosting oil and gas production.
- (b) Insufficient information is available to fully assess the science of the practice of hydraulic fracturing and other well stimulation treatment technologies in California, including environmental, occupational, and public health hazards and risks.
- (c) Providing transparency and accountability to the public regarding well stimulation treatments, including, but not limited to, hydraulic fracturing, associated emissions to the environment, and the handling, processing, and disposal of well stimulation and related wastes, including from hydraulic fracturing, is of paramount concern.
- (d) The public disclosure of chemical information required by this act ensures that potential public exposure to, and dose received from, well stimulation treatment fluid chemicals can be reasonably discerned.
- (e) The Legislature encourages the use or reuse of treated or untreated water and produced water for well stimulation treatments and well stimulation treatment-related activities.
- SEC. 2. Article 3 (commencing with Section 3150) is added to Chapter 1 of Division 3 of the Public Resources Code, to read:

Article 3. Well Stimulation

- 3150. "Additive" means a substance or combination of substances added to a base fluid for purposes of preparing well stimulation treatment fluid which includes, but is not limited to, an acid stimulation treatment fluid or a hydraulic fracturing fluid. An additive may, but is not required to, serve additional purposes beyond the transmission of hydraulic pressure to the geologic formation. An additive may be of any phase and includes proppants.
- 3151. "Base fluid" means the continuous phase fluid used in the makeup of a well stimulation treatment fluid, including, but not limited to, an acid stimulation treatment fluid or a hydraulic fracturing fluid. The continuous phase fluid may include, but is not limited to, water, and may be a liquid or a hydrocarbon or nonhydrocarbon gas. A well stimulation treatment may use more than one base fluid.
- 3152. "Hydraulic fracturing" means a well stimulation treatment that, in whole or in part, includes the pressurized injection of hydraulic fracturing fluid or fluids into an underground geologic formation in order to fracture or with the intent to fracture the formation, thereby causing or enhancing, for the purposes of this division, the production of oil or gas from a well.

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- 3153. "Well stimulation treatment fluid" means a base fluid mixed with physical and chemical additives, which may include acid, for the purpose of a well stimulation treatment. A well stimulation treatment may include more than one well stimulation treatment fluid. Well stimulation treatment fluids include, but are not limited to, hydraulic fracturing fluids and acid stimulation treatment fluids.
- 3154. "Proppants" means materials inserted or injected into the underground geologic formation that are intended to prevent fractures from closing.
- 3155. "Supplier" means an entity performing a well stimulation treatment or an entity supplying an additive or proppant directly to the operator for use in a well stimulation treatment.
- 3156. "Surface property owner" means the owner of 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.
- 3157. (a) For purposes of this article, "well stimulation treatment" means any treatment of a well designed to enhance oil and gas production or recovery by increasing the permeability of the formation. Well stimulation treatments include, but are not limited to, hydraulic fracturing treatments and acid well stimulation treatments.
- (b) Well stimulation treatments do not include steam flooding, water flooding, or cyclic steaming and do not include routine well cleanout work, routine well maintenance, routine removal of formation damage due to drilling, bottom hole pressure surveys, or routine activities that do not affect the integrity of the well or the formation.
- 3158. "Acid well stimulation treatment" means a well stimulation treatment that uses, in whole or in part, the application of one or more acids to the well or underground geologic formation. The acid well stimulation treatment may be at any applied pressure and may be used in combination with hydraulic fracturing treatments or other well stimulation treatments. Acid well stimulation treatments include acid matrix stimulation treatments and acid fracturing treatments. Acid matrix stimulation treatments are acid treatments conducted at pressures lower than the applied pressure necessary to fracture the underground geologic formation.
- 3159. "Flowback fluid" means the fluid recovered from the treated well before the commencement of oil and gas production from that well following a well stimulation treatment. The flowback fluid may include materials of any phase.
- 3160. (a) On or before January 1, 2015, the Secretary of the Natural Resources Agency shall cause to be conducted, and completed, an independent scientific study on well stimulation treatments, including, but not limited to, hydraulic fracturing and acid well stimulation treatments. The scientific study shall evaluate the hazards and risks and potential hazards and risks that well stimulation treatments pose to natural resources and public, occupational, and environmental health and safety. The scientific study shall do all of the following:

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- (1) Follow the well-established standard protocols of the scientific profession, including, but not limited to, the use of recognized experts, peer review, and publication.
- (2) Identify areas with existing and potential conventional and unconventional oil and gas reserves where well stimulation treatments are likely to spur or enable oil and gas exploration and production.
- (3) (A) Evaluate all aspects and effects of well stimulation treatments, including, but not limited to, the well stimulation treatment, additive and water transportation to and from the well site, mixing and handling of the well stimulation treatment fluids and additives onsite, the use and potential for use of nontoxic additives and the use or reuse of treated or produced water in well stimulation treatment fluids, flowback fluids and handling, treatment, and disposal of flowback fluids and other materials, if any, generated by the treatment. Specifically, the potential for the use of recycled water in well stimulation treatments, including appropriate water quality requirements and available treatment technologies, shall be evaluated. Well stimulation treatments include, but are not limited to, hydraulic fracturing and acid well stimulation treatments.
- (B) Review and evaluate acid matrix stimulation treatments, including the range of acid volumes applied per treated foot and total acid volumes used in treatments, types of acids, acid concentration, and other chemicals used in the treatments.
- (4) Consider, at a minimum, atmospheric emissions, including potential greenhouse gas emissions, the potential degradation of air quality, potential impacts on wildlife, native plants, and habitat, including habitat fragmentation, potential water and surface contamination, potential noise pollution, induced seismicity, and the ultimate disposition, transport, transformation, and toxicology of well stimulation treatments, including acid well stimulation fluids, hydraulic fracturing fluids, and waste hydraulic fracturing fluids and acid well stimulation in the environment.
- (5) Identify and evaluate the geologic features present in the vicinity of a well, including the well bore, that should be taken into consideration in the design of a proposed well stimulation treatment.
- (6) Include a hazard assessment and risk analysis addressing occupational and environmental exposures to well stimulation treatments, including hydraulic fracturing treatments, hydraulic fracturing treatment-related processes, acid well stimulation treatments, acid well stimulation treatment-related processes, and the corresponding impacts on public health and safety with the participation of the Office of Environmental Health Hazard Assessment.
- (7) Clearly identify where additional information is necessary to inform and improve the analyses.
- (b) (1) (A) On or before January 1, 2015, the division, in consultation with the Department of Toxic Substances Control, the State Air Resources Board, the State Water Resources Control Board, the Department of Resources Recycling and Recovery, and any local air districts and regional water quality control boards in areas where well stimulation treatments,

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including acid well stimulation treatments and hydraulic fracturing treatments may occur, shall adopt rules and regulations specific to well stimulation treatments. The rules and regulations shall include, but are not limited to, revisions, as needed, to the rules and regulations governing construction of wells and well casings to ensure integrity of wells, well casings, and the geologic and hydrologic isolation of the oil and gas formation during and following well stimulation treatments, and full disclosure of the composition and disposition of well stimulation fluids, including, but not limited to, hydraulic fracturing fluids, acid well stimulation fluids, and flowback fluids.

- (B) The rules and regulations shall additionally include provisions for an independent entity or person to perform the notification requirements pursuant to paragraph (6) of subdivision (d), for the operator to provide for baseline and followup water testing upon request as specified in paragraph (7) of subdivision (d).
- (C) (i) In order to identify the acid matrix stimulation treatments that are subject to this section, the rules and regulations shall establish threshold values for acid volume applied per treated foot of any individual stage of the well or for total acid volume of the treatment, or both, based upon a quantitative assessment of the risks posed by acid matrix stimulation treatments that exceed the specified threshold value or values in order to prevent, as far as possible, damage to life, health, property, and natural resources pursuant to Section 3106.
- (ii) On or before January 1, 2020, the division shall review and evaluate the threshold values for acid volume applied per treated foot and total acid volume of the treatment, based upon data collected in the state, for acid matrix stimulation treatments. The division shall revise the values through the regulatory process, if necessary, based upon the best available scientific information, including the results of the independent scientific study pursuant to subparagraph (B) of paragraph (3) of subdivision (a).
- (2) Full disclosure of the composition and disposition of well stimulation fluids, including, but not limited to, hydraulic fracturing fluids and acid stimulation treatment fluids, shall, at a minimum, include:
 - (A) The date of the well stimulation treatment.
- (B) A complete list of the names, Chemical Abstract Service (CAS) numbers, and maximum concentration, in percent by mass, of each and every chemical constituent of the well stimulation treatment fluids used. If a CAS number does not exist for a chemical constituent, the well owner or operator may provide another unique identifier, if available.
- (C) The trade name, the supplier, concentration, and a brief description of the intended purpose of each additive contained in the well stimulation treatment fluid.
- (D) The total volume of base fluid used during the well stimulation treatment, and the identification of whether the base fluid is water suitable for irrigation or domestic purposes, water not suitable for irrigation or domestic purposes, or a fluid other than water.
- (E) The source, volume, and specific composition and disposition of all water, including, but not limited to, all water used as base fluid during the

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well stimulation treatment and recovered from the well following the well stimulation treatment that is not otherwise reported as produced water pursuant to Section 3227. Any repeated reuse of treated or untreated water for well stimulation treatments and well stimulation treatment-related activities shall be identified.

- (F) The specific composition and disposition of all well stimulation treatment fluids, including waste fluids, other than water.
- (G) Any radiological components or tracers injected into the well as part of, or in order to evaluate, the well stimulation treatment, a description of the recovery method, if any, for those components or tracers, the recovery rate, and specific disposal information for recovered components or tracers.
 - (H) The radioactivity of the recovered well stimulation fluids.
- (I) The location of the portion of the well subject to the well stimulation treatment and the extent of the fracturing or other modification, if any, surrounding the well induced by the treatment.
- (c) (1) Through the consultation process described in paragraph (1) of subdivision (b), the division shall collaboratively identify and delineate the existing statutory authority and regulatory responsibility relating to well stimulation treatments and well stimulation treatment-related activities of the Department of Toxic Substances Control, the State Air Resources Board, any local air districts, the State Water Resources Control Board, the Department of Resources Recycling and Recovery, any regional water quality control board, and other public entities, as applicable. This shall specify how the respective authority, responsibility, and notification and reporting requirements associated with well stimulation treatments and well stimulation treatment-related activities are divided among each public entity.
- (2) On or before January 1, 2015, the division shall enter into formal agreements with the Department of Toxic Substances Control, the State Air Resources Board, any local air districts where well stimulation treatments may occur, the State Water Resources Control Board, the Department of Resources Recycling and Recovery, and any regional water quality control board where well stimulation treatments may occur, clearly delineating respective authority, responsibility, and notification and reporting requirements associated with well stimulation treatments and well stimulation treatment-related activities, including air and water quality monitoring, in order to promote regulatory transparency and accountability.
- (3) The agreements under paragraph (2) shall specify the appropriate public entity responsible for air and water quality monitoring and the safe and lawful disposal of materials in landfills, include trade secret handling protocols, if necessary, and provide for ready public access to information related to well stimulation treatments and related activities.
- (4) Regulations, if necessary, shall be revised appropriately to incorporate the agreements under paragraph (2).
- (d) (1) Notwithstanding any other law or regulation, prior to performing a well stimulation treatment on a well, the operator shall apply for a permit to perform a well stimulation treatment with the supervisor or district deputy. The well stimulation treatment permit application shall contain the pertinent

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data the supervisor requires on printed forms supplied by the division or on other forms acceptable to the supervisor. The information provided in the well stimulation treatment permit application shall include, but is not limited to, the following:

- (A) The well identification number and location.
- (B) The time period during which the well stimulation treatment is planned to occur.
 - (C) A water management plan that shall include all of the following:
- (i) An estimate of the amount of water to be used in the treatment. Estimates of water to be recycled following the well stimulation treatment may be included.
 - (ii) The anticipated source of the water to be used in the treatment.
- (iii) The disposal method identified for the recovered water in the flowback fluid from the treatment that is not produced water included in the statement pursuant to Section 3227.
- (D) A complete list of the names, Chemical Abstract Service (CAS) numbers, and estimated concentrations, in percent by mass, of each and every chemical constituent of the well stimulation fluids anticipated to be used in the treatment. If a CAS number does not exist for a chemical constituent, the well owner or operator may provide another unique identifier, if available.
- (E) The planned location of the well stimulation treatment on the well bore, the estimated length, height, and direction of the induced fractures or other planned modification, if any, and the location of existing wells, including plugged and abandoned wells, that may be impacted by these fractures and modifications.
- (F) A groundwater monitoring plan. Required groundwater monitoring in the vicinity of the well subject to the well stimulation treatment shall be satisfied by one of the following:
- (i) The well is located within the boundaries of an existing oil or gas field-specific or regional monitoring program developed pursuant to Section 10783 of the Water Code.
- (ii) The well is located within the boundaries of an existing oil or gas field-specific or regional monitoring program developed and implemented by the well owner or operator meeting the model criteria established pursuant to Section 10783 of the Water Code.
- (iii) Through a well-specific monitoring plan implemented by the owner or operator meeting the model criteria established pursuant to Section 10783 of the Water Code, and submitted to the appropriate regional water board for review.
- (G) The estimated amount of treatment-generated waste materials that are not reported in subparagraph (C) and an identified disposal method for the waste materials.
- (2) (A) At the supervisor's discretion, and if applied for concurrently, the well stimulation treatment permit described in this section may be combined with the well drilling and related operation notice of intent required pursuant to Section 3203 into a single combined authorization. The portion

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of the combined authorization applicable to well stimulation shall meet all of the requirements of a well stimulation treatment permit pursuant to this section.

- (B) Where the supervisor determines that the activities proposed in the well stimulation treatment permit or the combined authorization have met all of the requirements of Division 13 (commencing with Section 21000), and have been fully described, analyzed, evaluated, and mitigated, no additional review or mitigation shall be required.
- (C) The time period available for approval of the portion of the combined authorization applicable to well stimulation is subject to the terms of this section, and not Section 3203.
- (3) (A) The supervisor or district deputy shall review the well stimulation treatment permit application and may approve the permit if the application is complete. An incomplete application shall not be approved.
- (B) A well stimulation treatment or repeat well stimulation treatment shall not be performed on any well without a valid permit that the supervisor or district deputy has approved.
- (C) In considering the permit application, the supervisor shall evaluate the quantifiable risk of the well stimulation treatment.
- (4) The well stimulation treatment permit shall expire one year from the date that the permit is issued.
- (5) Within five business days of issuing a permit to perform a well stimulation treatment, the division shall provide a copy of the permit to the appropriate regional water quality control board or boards and to the local planning entity where the well, including its subsurface portion, is located. The division shall also post the permit on the publicly accessible portion of its Internet Web site within five business days of issuing a permit.
- (6) (A) It is the policy of the state that a copy of the approved well stimulation treatment permit and information on the available water sampling and testing be provided to every tenant of the surface property and every surface property owner or authorized agent of that owner whose property line location is one of the following:
 - (i) Within a 1,500 foot radius of the wellhead.
- (ii) Within 500 feet from the horizontal projection of all subsurface portions of the designated well to the surface.
- (B) (i) The well owner or operator shall identify the area requiring notification and shall contract with an independent entity or person who is responsible for, and shall perform, the notification required pursuant to subparagraph (A).
- (ii) The independent entity or person shall identify the individuals notified, the method of notification, the date of the notification, a list of those notified, and shall provide a list of this information to the division.
- (iii) The performance of the independent entity or persons shall be subject to review and audit by the division.
- (C) A well stimulation treatment shall not commence before 30 calendar days after the permit copies pursuant to subparagraph (A) are provided.

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- (7) (A) A property owner notified pursuant to paragraph (6) may request water quality sampling and testing from a designated qualified contractor on any water well suitable for drinking or irrigation purposes and on any surface water suitable for drinking or irrigation purposes as follows:
- (i) Baseline measurements prior to the commencement of the well stimulation treatment.
- (ii) Followup measurements after the well stimulation treatment on the same schedule as the pressure testing of the well casing of the treated well.
- (B) The State Water Resources Control Board shall designate one or more qualified independent third-party contractor or contractors that adhere to board-specified standards and protocols to perform the water sampling and testing. The well owner or operator shall pay for the sampling and testing. The sampling and testing performed shall be subject to audit and review by the State Water Resources Control Board or applicable regional water quality control board, as appropriate.
- (C) The results of the water testing shall be provided to the division, appropriate regional water board, and the property owner or authorized agent. A tenant notified pursuant to paragraph (6) shall receive information on the results of the water testing to the extent authorized by his or her lease and, where the tenant has lawful use of the ground or surface water identified in subparagraph (A), the tenant may independently contract for similar groundwater or surface water testing.
- (8) The division shall retain a list of the entities and property owners notified pursuant to paragraphs (5) and (6).
- (9) The operator shall provide notice to the division at least 72 hours prior to the actual start of the well stimulation treatment in order for the division to witness the treatment.
- (e) The Secretary of the Natural Resources Agency shall notify the Joint Legislative Budget Committee and the chairs of the Assembly Natural Resources, Senate Environmental Quality, and Senate Natural Resources and Water Committees on the progress of the independent scientific study on well stimulation and related activities. The first progress report shall be provided to the Legislature on or before April 1, 2014, and progress reports shall continue every four months thereafter until the independent study is completed, including a peer review of the study by independent scientific experts.
- (f) If a well stimulation treatment is performed on a well, a supplier that performs any part of the stimulation or provides additives directly to the operator for a well stimulation treatment shall furnish the operator with information suitable for public disclosure needed for the operator to comply with subdivision (g). This information shall be provided as soon as possible but no later than 30 days following the conclusion of the well stimulation treatment.
- (g) (1) Within 60 days following cessation of a well stimulation treatment on a well, the operator shall post or cause to have posted to an Internet Web site designated or maintained by the division and accessible to the public, all of the well stimulation fluid composition and disposition information

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required to be collected pursuant to rules and regulations adopted under subdivision (b), including well identification number and location. This shall include the collected water quality data, which the operator shall report electronically to the State Water Resources Control Board.

- (2) (A) The division shall commence the process to develop an Internet Web site for operators to report the information required under this section. The Internet Web site shall be capable of organizing the reported information in a format, such as a spreadsheet, that allows the public to easily search and aggregate, to the extent practicable, each type of information required to be collected pursuant to subdivision (b) using search functions on that Internet Web site. The Internet Web site shall be functional within two years of the Department of Technology's approval of a Feasibility Study Report or appropriation authority to fund the development of the Internet Web site, whichever occurs latest, but no later than January 1, 2016.
- (B) The division may direct reporting to an alternative Internet Web site developed by the Ground Water Protection Council and the Interstate Oil and Gas Compact Commission in the interim until such time as approval or appropriation authority pursuant to subparagraph (A) occur. Prior to the implementation of the division's Internet Web site, the division shall obtain the data reported by operators to the alternative Internet Web site and make it available in an organized electronic format to the public no later than 15 days after it is reported to the alternative Web site.
 - (h) The operator is responsible for compliance with this section.
- (i) (1) All geologic features within a distance reflecting an appropriate safety factor of the fracture zone for well stimulation treatments that fracture the formation and that have the potential to either limit or facilitate the migration of fluids outside of the fracture zone shall be identified and added to the well history. Geologic features include seismic faults identified by the California Geologic Survey.
- (2) For the purposes of this section, the "fracture zone" is defined as the volume surrounding the well bore where fractures were created or enhanced by the well stimulation treatment. The safety factor shall be at least five and may vary depending upon geologic knowledge.
- (3) The division shall review the geologic features important to assessing well stimulation treatments identified in the independent study pursuant to paragraph (5) of subdivision (a). Upon completion of the review, the division shall revise the regulations governing the reporting of geologic features pursuant to this subdivision accordingly.
- (j) (1) Public disclosure of well stimulation treatment fluid information claimed to contain trade secrets is governed by Section 1060 of the Evidence Code, or the Uniform Trade Secrets Act (Title 5 (commencing with Section 3426) of Part 1 of Division 4 of the Civil Code), and the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code).
- (2) Notwithstanding any other law or regulation, none of the following information shall be protected as a trade secret:

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- (A) The identities of the chemical constituents of additives, including CAS identification numbers.
- (B) The concentrations of the additives in the well stimulation treatment fluids.
 - (C) Any air or other pollution monitoring data.
- (D) Health and safety data associated with well stimulation treatment fluids.
 - (E) The chemical composition of the flowback fluid.
- (3) If a trade secret claim is invalid or invalidated, the division shall release the information to the public by revising the information released pursuant to subdivision (g). The supplier shall notify the division of any change in status within 30 days.
- (4) (A) If a supplier believes that information regarding a chemical constituent of a well stimulation fluid is a trade secret, the supplier shall nevertheless disclose the information to the division in conjunction with a well stimulation treatment permit application, if not previously disclosed, within 30 days following cessation of well stimulation on a well, and shall notify the division in writing of that belief.
- (B) A trade secret claim shall not be made after initial disclosure of the information to the division.
- (C) To comply with the public disclosure requirements of this section, the supplier shall indicate where trade secret information has been withheld and provide substitute information for public disclosure. The substitute information shall be a list, in any order, of the chemical constituents of the additive, including CAS identification numbers. The division shall review and approve the supplied substitute information.
- (D) This subdivision does not permit a supplier to refuse to disclose the information required pursuant to this section to the division.
- (5) In order to substantiate the trade secret claim, the supplier shall provide information to the division that shows all of the following:
- (A) The extent to which the trade secret information is known by the supplier's employees, others involved in the supplier's business and outside the supplier's business.
- (B) The measures taken by the supplier to guard the secrecy of the trade secret information.
- (C) The value of the trade secret information to the supplier and its competitors.
- (D) The amount of effort or money the supplier expended developing the trade secret information and the ease or difficulty with which the trade secret information could be acquired or duplicated by others.
- (6) If the division determines that the information provided in support of a request for trade secret protection pursuant to paragraph (5) is incomplete, the division shall notify the supplier and the supplier shall have 30 days to complete the submission. An incomplete submission does not meet the substantive criteria for trade secret designation.
- (7) If the division determines that the information provided in support of a request for trade secret protection does not meet the substantive criteria

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for trade secret designation, the department shall notify the supplier by certified mail of its determination. The division shall release the information to the public, but not earlier than 60 days after the date of mailing the determination, unless, prior to the expiration of the 60-day period, the supplier obtains an action in an appropriate court for a declaratory judgment that the information is subject to protection or for a preliminary injunction prohibiting disclosure of the information to the public and provides notice to the division of the court order.

- (8) The supplier is not required to disclose trade secret information to the operator.
- (9) Upon receipt of a request for the release of trade secret information to the public, the following procedure applies:
- (A) The division shall notify the supplier of the request in writing by certified mail, return receipt requested.
- (B) The division shall release the information to the public, but not earlier than 60 days after the date of mailing the notice of the request for information, unless, prior to the expiration of the 60-day period, the supplier obtains an action in an appropriate court for a declaratory judgment that the information is subject to protection or for a preliminary injunction prohibiting disclosure of the information to the public and provides notice to the division of that action.
- (10) The division shall develop a timely procedure to provide trade secret information in the following circumstances:
- (A) To an officer or employee of the division, the state, local governments, including, but not limited to, local air districts, or the United States, in connection with the official duties of that officer or employee, to a health professional under any law for the protection of health, or to contractors with the division or other government entities and their employees if, in the opinion of the division, disclosure is necessary and required for the satisfactory performance of a contract, for performance of work, or to protect health and safety.
- (B) To a health professional in the event of an emergency or to diagnose or treat a patient.
- (C) In order to protect public health, to any health professional, toxicologist, or epidemiologist who is employed in the field of public health and who provides a written statement of need. The written statement of need shall include the public health purposes of the disclosure and shall explain the reason the disclosure of the specific chemical and its concentration is required.
- (D) A health professional may share trade secret information with other persons as may be professionally necessary, in order to diagnose or treat a patient, including, but not limited to, the patient and other health professionals, subject to state and federal laws restricting disclosure of medical records including, but not limited to, Chapter 2 (commencing with Section 56.10) of Part 2.6 of Division 1 of the Civil Code.
- (E) For purposes of this paragraph, "health professional" means any person licensed or certified pursuant to Division 2 (commencing with Section

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500) of the Business and Professions Code, the Osteopathic Initiative Act, the Chiropractic Initiative Act, or the Emergency Medical Services System and the Prehospital Emergency Medical Care Personnel Act (Division 2.5 (commencing with Section 1797) of the Health and Safety Code).

- (F) A person in possession of, or access to, confidential trade secret information pursuant to the provisions of this subdivision may disclose this information to any person who is authorized to receive it. A written confidentiality agreement shall not be required.
- (k) A well granted confidential status pursuant to Section 3234 shall not be required to disclose well stimulation treatment fluid information pursuant to subdivision (g) until the confidential status of the well ceases. Notwithstanding the confidential status of a well, it is public information that a well will be or has been subject to a well stimulation treatment.
- (*l*) The division shall perform random periodic spot check inspections to ensure that the information provided on well stimulation treatments is accurately reported, including that the estimates provided prior to the commencement of the well stimulation treatment are reasonably consistent with the well history.
- (m) Where the division shares jurisdiction over a well or the well stimulation treatment on a well with a federal entity, the division's rules and regulations shall apply in addition to all applicable federal laws and regulations.
- (n) This article does not relieve the division or any other agency from complying with any other provision of existing laws, regulations, and orders.
- (o) Well stimulation treatments used for routine maintenance of wells associated with underground storage facilities where natural gas is injected into and withdrawn from depleted or partially depleted oil or gas reservoirs pursuant to subdivision (a) of Section 3403.5 are not subject to this section.
- 3161. (a) The division shall finalize and implement the regulations governing this article on or before January 1, 2015.
- (b) The division shall allow, until regulations governing this article are finalized and implemented, and upon written notification by an operator, all of the activities defined in Section 3157, provided all of the following conditions are met:
- (1) The owner or operator certifies compliance with subdivision (b) of, subparagraphs (A) to (F), inclusive, of paragraph (1) and paragraphs (6) and (7) of subdivision (d) of, and subdivision (g) of, Section 3160.
- (2) The owner or operator provides a complete well history, incorporating the information required by Section 3160, to the division on or before March 2015
- (3) The division conducts an environmental impact report (EIR) pursuant to the California Environmental Quality Act (Division 13 (commencing with Section 21000)), in order to provide the public with detailed information regarding any potential environmental impacts of well stimulation in the state.
- (4) Any environmental review conducted by the division shall fully comply with all of the following requirements:

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- (A) The EIR shall be certified by the division as the lead agency, no later than July 1, 2015.
- (B) The EIR shall address the issue of activities that may be conducted as defined in Section 3157 and that may occur at oil wells in the state existing prior to, and after, the effective date of this section.
- (C) The EIR shall not conflict with an EIR conducted by a local lead agency that is certified on or before July 1, 2015. Nothing in this section prohibits a local lead agency from conducting its own EIR.
- (5) The division ensures that all activities pursuant to this section fully conform with this article and other applicable provisions of law on or before December 31, 2015, through a permitting process.
- (6) The division has the emergency regulatory authority to implement the purposes of this section.
- 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, acid treatment data, and the results of production and other tests during drilling operations. All data on well stimulation treatments pursuant to Section 3160 shall be recorded in the history.
 - SEC. 4. Section 3215 of the Public Resources Code is amended to read: 3215. (a) Within 60 days after the date of cessation of drilling, rework,
- 3215. (a) Within 60 days after the date of cessation of drilling, rework, well stimulation treatment, or abandonment operations, or the date of suspension of operations, the operator shall file with the district deputy, in a 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 supervisor shall include information or electronic links to information provided pursuant to subdivision (g) of Section 3160 on existing publicly accessible maps on the division's Internet Web site, and make the information available such that well stimulation treatment and related information are associated with each specific well. If data is reported on an Internet Web site not maintained by the division pursuant to paragraph (2) of subdivision (g) of Section 3160, the division shall provide electronic links to that Internet Web site. The public shall be able to search and sort the hydraulic well stimulation and related information by at least the following criteria:
 - (1) Geographic area.
 - (2) Additive.
 - (3) Chemical constituent.
 - (4) Chemical Abstract Service number.
 - (5) Time period.
 - (6) Operator.
- (c) Notwithstanding Section 10231.5 of the Government Code, on or before January 1, 2016, and annually thereafter, the supervisor shall, in

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compliance with Section 9795 of the Government Code, prepare and transmit to the Legislature a comprehensive report on well stimulation treatments in the exploration and production of oil and gas resources in California. The report shall include aggregated data of all of the information required to be reported pursuant to Section 3160 reported by the district, county, and operator. The report also shall include relevant additional information, as necessary, including, but not limited to, all of the following:

- (1) Aggregated data detailing the disposition of any produced water from wells that have undergone well stimulation treatments.
- (2) Aggregated data describing the formations where wells have received well stimulation treatments including the range of safety factors used and fracture zone lengths.
- (3) The number of emergency responses to a spill or release associated with a well stimulation treatment.
- (4) Aggregated data detailing the number of times trade secret information was not provided to the public, by county and by each company, in the preceding year.
- (5) Data detailing the loss of well and well casing integrity in the preceding year for wells that have undergone well stimulation treatment. For comparative purposes, data detailing the loss of well and well casing integrity in the preceding year for all wells shall also be provided. The cause of each well and well casing failure, if known, shall also be provided.
- (6) The number of spot check inspections conducted pursuant to subdivision (l) of Section 3160, including the number of inspections where the composition of well stimulation fluids were verified and the results of those inspections.
 - (7) The number of well stimulation treatments witnessed by the division.
- (8) The number of enforcement actions associated with well stimulation treatments, including, but not limited to, notices of deficiency, notices of violation, civil or criminal enforcement actions, and any penalties assessed.
- (d) The report shall be made publicly available and an electronic version shall be available on the division's Internet Web site.
- SEC. 5. Section 3236.5 of the Public Resources Code is amended to read:
- 3236.5. (a) A person who violates this chapter or a regulation implementing this chapter is subject to a civil penalty not to exceed twenty-five thousand dollars (\$25,000) for each violation. A person who commits a violation of Article 3 (commencing with Section 3150) is subject to a civil penalty of not less than ten thousand dollars (\$10,000) and not to exceed twenty-five thousand dollars (\$25,000) per day per violation. An act of God and an act of vandalism beyond the reasonable control of the operator shall not be considered a violation. The civil penalty shall be imposed by an order of the supervisor pursuant to Section 3225 upon a determination that a violation has been committed by the person charged. The imposition of a civil penalty under this section shall be in addition to any other penalty provided by law for the violation. When establishing the

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amount of the civil penalty pursuant to this section, the supervisor shall consider, in addition to other relevant circumstances, all of the following:

- (1) The extent of harm caused by the violation.
- (2) The persistence of the violation.
- (3) The pervasiveness of the violation.
- (4) The number of prior violations by the same violator.
- (b) An order of the supervisor imposing a civil penalty shall be reviewable pursuant to Article 6 (commencing with Section 3350). When the order of the supervisor has become final and the penalty has not been paid, the supervisor may apply to the appropriate superior court for an order directing payment of the civil penalty. The supervisor may also seek from the court an order directing that production from the well or use of the production facility that is the subject of the civil penalty order be discontinued until the violation has been remedied to the satisfaction of the supervisor and the civil penalty has been paid.
- (c) Any amount collected under this section shall be deposited in the Oil, Gas, and Geothermal Administrative Fund.
- SEC. 6. Section 3401 of the Public Resources Code is amended to read: 3401. (a) The proceeds of charges levied, assessed, and collected pursuant to this article upon the properties of every person operating or owning an interest in the production of a well shall be used exclusively for the support and maintenance of the department charged with the supervision of oil and gas operations.
- (b) Notwithstanding subdivision (a), the proceeds of charges levied, assessed, and collected pursuant to this article upon the properties of every person operating or owning an interest in the production of a well undergoing a well stimulation treatment, may be used by public entities, subject to appropriation by the Legislature, for all costs associated with both of the following:
- (1) Well stimulation treatments, including rulemaking and scientific studies required to evaluate the treatment, inspections, any air and water quality sampling, monitoring, and testing performed by public entities.
- (2) The costs of the State Water Resources Control Board and the regional water quality control boards in carrying out their responsibilities pursuant to Section 3160 and Section 10783 of the Water Code.
 - SEC. 7. Section 10783 is added to the Water Code, to read:
- 10783. (a) The Legislature finds and declares that protecting the state's groundwater for beneficial use, particularly sources and potential sources of drinking water, is of paramount concern.
- (b) The Legislature further finds and declares that strategic, scientifically based groundwater monitoring of the state's oil and gas fields is critical to allaying the public's concerns regarding well stimulation treatments of oil and gas wells.
- (c) On or before July 1, 2015, in order to assess the potential effects of well stimulation treatments, as defined in Article 3 (commencing with Section 3150) of Chapter 1 of Division 3 of the Public Resources Code, on the state's groundwater resources in a systematic way, the state board shall

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develop model groundwater monitoring criteria to be implemented either on a well-by-well basis for a well subject to well stimulation treatment, or on a regional scale. The model criteria shall address a range of spatial sampling scales from methods for conducting appropriate monitoring on individual oil and gas wells subject to a well stimulation treatment, to methods for conducting a regional groundwater monitoring program. The state board shall take into consideration the recommendations received pursuant to subdivision (d) and shall include in the model criteria, at a minimum, the components identified in subdivision (f). The state board shall prioritize monitoring of groundwater that is or has the potential to be a source of drinking water, but shall protect all waters designated for any beneficial use.

- (d) The state board, in consultation with the Department of Conservation, Division of Oil, Gas, and Geothermal Resources, shall seek the advice of experts on the design of the model groundwater monitoring criteria. The experts shall assess and make recommendations to the state board on the model criteria. These recommendations shall prioritize implementation of regional groundwater monitoring programs statewide, as warranted, based upon the prevalence of well stimulation treatments of oil and gas wells and groundwater suitable as a source of drinking water.
- (e) The state board shall also seek the advice of stakeholders representing the diverse interests of the oil- and gas-producing areas of the state. The stakeholders shall include the oil and gas industry, agriculture, environmental justice, and local government, among others, with regional representation commensurate with the intensity of oil and gas development in that area. The stakeholders shall also make recommendations to the state board regarding the development and implementation of groundwater monitoring criteria, including priority locations for implementation.
- (f) The scope and nature of the model groundwater monitoring criteria shall include the determination of all of the following:
- (1) An assessment of the areas to conduct groundwater quality monitoring and their appropriate boundaries.
 - (2) A list of the constituents to measure and assess water quality.
- (3) The location, depth, and number of monitoring wells necessary to detect groundwater contamination at spatial scales ranging from an individual oil and gas well to a regional groundwater basin including one or more oil and gas fields.
 - (4) The frequency and duration of the monitoring.
- (5) A threshold criteria indicating a transition from well-by-well monitoring to a regional monitoring program.
 - (6) Data collection and reporting protocols.
 - (7) Public access to the collected data under paragraph (6).
- (g) Factors to consider in addressing subdivision (f) shall include, but are not limited to, all of the following:
 - (1) The existing quality and existing and potential use of the groundwater.
- (2) Groundwater that is not a source of drinking water consistent with the United States Environmental Protection Agency's definition of an

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Underground Source of Drinking Water as containing less than 10,000 milligrams per liter total dissolved solids in groundwater (40 C.F.R. 144.3), including exempt aquifers pursuant to Section 146.4 of Title 40 of the Code of Federal Regulations.

- (3) Proximity to human population, public water service wells, and private groundwater use, if known.
- (4) The presence of existing oil and gas production fields, including the distribution, physical attributes, and operational status of oil and gas wells therein.
- (5) Events, including well stimulation treatments and oil and gas well failures, among others, that have the potential to contaminate groundwater, appropriate monitoring to evaluate whether groundwater contamination can be attributable to a particular event, and any monitoring changes necessary if groundwater contamination is observed.
- (h) (1) On or before January 1, 2016, the state board or appropriate regional board shall begin implementation of the regional groundwater monitoring programs based upon the developed criteria under subdivision (c).
- (2) In the absence of state implementation of a regional groundwater monitoring program, a well owner or operator may develop and implement an area-specific groundwater monitoring program based upon the developed criteria under subdivision (c), subject to approval by the state or regional board, if applicable, and that meets the requirements of this section.
- (i) The model criteria for either a well-by-well basis for a well subject to well stimulation treatment, or for a regional groundwater monitoring program, shall be used to satisfy the permitting requirements for well stimulation treatments on oil and gas wells pursuant to Section 3160 of the Public Resources Code. The model criteria used on a well-by-well basis for a well subject to a well stimulation treatment shall be used where no regional groundwater monitoring plan approved by the state or regional board, if applicable, exists and has been implemented by either the state or regional board or the well owner or operator.
- (j) The model criteria shall accommodate monitoring where surface access is limited. Monitoring is not required for oil and gas wells where the wells do not penetrate groundwater of beneficial use, as determined by a regional water quality control board, or do not penetrate exempt aquifers pursuant to Section 146.4 of Title 40 of the Code of Federal Regulations.
- (k) (1) The model criteria and groundwater monitoring programs shall be reviewed and updated periodically, as needed.
- (2) The use of the United States Environmental Protection Agency's definition of an Underground Source of Drinking Water as containing less than 10,000 milligrams per liter total dissolved solids in groundwater (40 C.F.R. 144.3) and whether exempt aquifers pursuant to Section 146.4 of Title 40 of the Code of Federal Regulations shall be subject to groundwater monitoring shall be reviewed by the state board through a public process on or before January 1, 2020.

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- (*l*) (1) All groundwater quality data collected pursuant to subparagraph (F) of paragraph (1) of subdivision (d) of Section 3160 of the Public Resources Code shall be submitted to the state board in an electronic format that is compatible with the state board's GeoTracker database, following the guidelines detailed in Chapter 30 (commencing with Section 3890) of Division 3 of Title 23 of the California Code of Regulations.
- (2) A copy of the reported data under paragraph (1) shall be transferred by the state board to a public, nonprofit doctoral-degree-granting educational institution located in the San Joaquin Valley, administered pursuant to Section 9 of Article IX of the California Constitution, in order to form the basis of a comprehensive groundwater quality data repository to promote research, foster interinstitutional collaboration, and seek understanding of the numerous factors influencing the state's groundwater.
- (m) The adoption of criteria required pursuant to this section is exempt from the rulemaking provisions of the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code). The adoption of criteria pursuant to this section shall instead be accomplished by means of a public process reasonably calculated to give those persons interested in their adoption an opportunity to be heard.
- SEC. 8. 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 for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.