

CALIFORNIA

Administration

1. Agency regulating oil and gas exploration/production:

California Department of Conservation, Division of Oil, Gas, and Geothermal Resources; 801 K Street, MS 18-05, Sacramento, CA 95814-3530.

Phone: (916) 445-9686.

2. Contact for regulatory updates: Phone (916) 445-9686.

3. Docketing procedure: Hearings as needed. Notice of hearing sent to all concerned and interested parties and published in at least one newspaper of general circulation.

- a. Emergency orders: Yes. When the State Oil and Gas Supervisor determines that an emergency exists. PRC 3226.

3226. Within 30 days after service of an order pursuant to Sections 3224 and 3225, or Section 3237, or if there has been an appeal from the order to the director, within 30 days after service of the decision of the director, or if a review has been taken of the order of the director, within 10 days after affirmance of the order, the owner or operator shall commence in good faith the work ordered and continue it until completion. If the work has not been commenced and continued to completion, the supervisor may appoint necessary agents to enter the premises and perform the work. An accurate account of the expenditures shall be kept. Any amount so expended shall constitute a lien against real or personal property of the operator pursuant to the provisions of Section 3423.

Notwithstanding any other provisions of Section 3224, 3225, or 3237, if the supervisor determines that an emergency exists, the supervisor may order or undertake the actions he or she deems necessary to protect life, health, property, or natural resources.

- b. Notice: 20 days (may be as many as 30 days, depending on type of hearing). The Director of Conservation or the State Oil and Gas Supervisor is responsible to give notice, depending upon the type of order.
4. Agency regulating air emissions: The California Air Resources Board gathers air quality data for the State of California, ensures the quality of this data, designs and implements air models, and sets ambient air quality standards for the state.

California's 35 local air districts are responsible for promulgating rules and regulations for stationary sources in their respective districtsø

5. Agency regulating water quality: The State Water Resources Control Board and nine Regional Boards regulate water quality and water rights.

License

1. License required: No
2. Conditions of license: No

Bond/Surety

1. Purpose of surety: The principal named in the bond shall faithfully comply with all the provisions of this chapter, in drilling, re-drilling, deepening, or permanently altering the casing in any well or wells covered by the bond, and shall secure the state against all losses, charges, and expenses incurred by it to obtain the compliance by the principal named in the bond. Excerpt from Public Resources Code (PRC) 3204.
2. Plugging and restoration: Yes PRC 3270.4

3270.4. (a) In addition to the bonding requirements under Article 4 (commencing with Section 3200), for an operator with a history of violating this chapter or that has outstanding liabilities to the state associated with a well or production facility, the supervisor may require a life-of-well or life-of-production facility bond in an amount adequate to ensure all of the following:

- (1) The proper plugging and abandonment of each well.
 - (2) The safe decommissioning of each production facility.
 - (3) The financing of spill response and incident cleanup.
- (b) Upon the failure of an operator to properly plug and abandon a well, decommission a production facility, or perform the appropriate spill response and incident cleanup, the supervisor may levy on the bond to obtain money to pay the cost of the work.
- (c) The supervisor may release a life-of-production facility bond upon the satisfactory decommissioning of a production facility, or when an operator has provided another valid life-of-production facility bond.
- (d) The supervisor may release a life-of-well bond upon the satisfactory plugging and abandonment of all wells covered by the bond or when an operator has provided another valid life-of-well bond.
- (e) Whenever an operator sells, assigns, transfers, conveys, exchanges, or otherwise disposes to another operator a well or production facility that is covered by a life-of-well bond or a life-of-production facility bond, the new operator shall replace the life-of-well or life-of-production bond, as applicable, and maintain the new bond for five years before it may be released by the supervisor.

(f) In lieu of the indemnity bond required by this section, the supervisor may accept a deposit given pursuant to Article 7 (commencing with Section 995.710) of Chapter 2 of Title 14 of Part 2 of the Code of Civil Procedure, excluding a deposit of money, bearer bonds, or bearer notes.

(g) The supervisor shall adopt regulations specifying the content, including the conditions, of the bond or other security instrument required by this section.

3. Compliance bond required: Yes. PRC 3204-3209.

3204. (a) An operator who, on or after January 1, 2018, engages in the drilling, redrilling, deepening, or in any operation permanently altering the casing, of a well, or who acquires a well, shall file with the supervisor an individual indemnity bond for each well so drilled, redrilled, deepened, or permanently altered, or acquired in the following amount:

(1) Twenty-five thousand dollars (\$25,000) for each well that is less than 10,000 feet deep.

(2) Forty thousand dollars (\$40,000) for each well that is 10,000 or more feet deep.

(b) The bond shall be filed with the supervisor at the time of the filing of the notice of intention to perform work on the well, as provided in Section 3203, or at the time of acquisition of the well, as provided in Section 3202. The bond shall be executed by the operator, as principal, and by an authorized surety company, as surety, on the condition that the principal named in the bond shall faithfully comply with all the provisions of this chapter, in drilling, redrilling, deepening, or permanently altering the casing in any well or wells covered by the bond, and shall secure the state against all losses, charges, and expenses incurred by it to obtain the compliance by the principal named in the bond.

(c) The conditions of the bond shall be stated in substantially the following language: "If the _____, the above bounden principal, shall well and truly comply with all the provisions of Division 3 (commencing with Section 3000) of the Public Resources Code and shall obey all lawful orders of the State Oil and Gas Supervisor or the district deputy or deputies, subject to subsequent appeal as provided in that division, and shall pay all charges, costs, and expenses incurred by the supervisor or the district deputy or deputies in respect of the well or wells or the property or properties of the principal, or assessed against the well or wells or the property or properties of the principal, in pursuance of the provisions of that division, then this obligation shall be void; otherwise, it shall remain in full force and effect."

(d) This section shall become operative on January 1, 2018.

3205. (a) An operator who engages in the drilling, redrilling, deepening, or in any operation permanently altering the casing, of 20 or more wells at any time, may file with the supervisor one blanket indemnity bond to cover all the operations in any of its wells in the state in lieu of an individual indemnity bond for each operation as required by Section 3204. The bond shall be executed by the operator, as principal, and by an authorized surety company, as surety, and shall be in substantially the same language and upon the same conditions as provided in Section 3204, except as to the

difference in the amount. The bond shall be provided in one of the following amounts, as applicable:

(1) The sum of two hundred thousand dollars (\$200,000), for an operator having 50 or fewer wells in the state, exclusive of properly abandoned wells.

(2) The sum of four hundred thousand dollars (\$400,000), for any operator having more than 50, but no more than 500, wells in the state, exclusive of properly abandoned wells.

(3) The sum of two million dollars (\$2,000,000), for any operator having more than 500, but no more than 10,000, wells in the state, exclusive of properly abandoned wells.

(4) The sum of three million dollars (\$3,000,000), for any operator having more than 10,000 wells in the state, exclusive of properly abandoned wells.

(b) This section shall become operative on January 1, 2018.

3205.1. (a) Notwithstanding Sections 3204 and 3205, a person who engages in the drilling, redrilling, deepening, or in any operation permanently altering the casing, of one or more wells located on submerged lands under ocean waters within the jurisdiction of this state, shall file with the supervisor a blanket indemnity bond for one million dollars (\$1,000,000) to cover all his or her operations in drilling, redrilling, deepening, or permanently altering the casing in any of his or her wells located on those submerged lands. The bond shall be executed by the person, as principal, and by an authorized surety company, as surety, and the conditions of the bond shall be the same as the conditions stated in section 3204, except for the difference in the amount.

(b) In addition to providing the bond required by subdivision (a), a person who operates one or more wells that are located on tide or submerged lands within the jurisdiction of this state shall provide an additional amount of security acceptable to the supervisor, covering the full costs of plugging and abandoning all of the operator's wells. The supervisor shall determine the amount of the security required of each operator, based on his or her determination of the reasonable costs of that plugging and abandonment. The supervisor may not adjust the amount of security required of each operator more frequently than once every three years, to reflect changes in those costs. An operator may self-insure this security obligation if the supervisor, at his or her discretion, determines that the operator has sufficient financial resources to plug and abandon the wells for which the operator is responsible. The security shall remain in effect until all wells are plugged and abandoned in accordance with Section 3208, but the supervisor shall reduce the amount of the security required of an operator to reflect reduced obligations as wells are plugged and abandoned.

(c) If the state lease or other agreement that sets forth obligations or performance requirements under the lease provides security that is equal to, or greater than, the total of the additional security required pursuant to subdivision (b), plus all other liabilities under the lease or other agreement, the supervisor shall not require the additional security.

3205.2. (a) Notwithstanding Section 3204, any person who engages in the operation of a class II commercial wastewater disposal well, as defined in subdivision (d), shall file an indemnity bond with the supervisor for one hundred thousand dollars (\$100,000) for each well so used. The bond shall cover all operations of drilling, redrilling, deepening,

altering casing, maintaining, or abandoning the well and attendant facilities. The bond shall be executed by the person as the principal, and by an authorized surety company as the surety, and, except for differences in the amount, shall be in substantially the same language and upon the same conditions as provided in Section 3204.

(b) A blanket bond submitted under subdivision (a) of Section 3205 may be used in lieu of the bond required in subdivision (a), except that the termination and cancellation shall be in accordance with subdivision (c) of this section.

(c) Notwithstanding Section 3207, any bond issued in compliance with this section may be terminated and canceled and the surety relieved of all obligations thereunder when the well is properly abandoned or another valid bond has been substituted therefor.

(d) A class II commercial wastewater disposal well is a well that is used to dispose of oilfield wastewater for a fee and that is regulated by the division pursuant to this chapter and Subpart F (commencing with Section 147.250) of Part 147 of Title 40 of the Code of Federal Regulations.

3205.5. In lieu of the indemnity bond required by Sections 3204, 3205, 3205.1, 3205.2, and 3206, a deposit may, with the written approval of the supervisor, be given pursuant to Article 7 (commencing with Section 995.710) of Chapter 2 of Title 14 of Part 2 of the Code of Civil Procedure, other than a deposit of money or bearer bonds or bearer notes.

3206. (a) The operator of any idle well shall do either of the following:

(1) No later than January 31 of each year, for each idle well that was an idle well at any time in the last calendar year, file with the supervisor an annual fee equal to the sum of the following amounts:

(A) One hundred fifty dollars (\$150) for each idle well that has been an idle well for three years or longer, but less than eight years.

(B) Three hundred dollars (\$300) for each idle well that has been an idle well for eight years or longer, but less than 15 years.

(C) Seven hundred fifty dollars (\$750) for each idle well that has been an idle well for 15 years or longer, but less than 20 years.

(D) One thousand five hundred dollars (\$1,500) for each idle well that has been an idle well for 20 years or longer.

(2) File a plan with the supervisor to provide for the management and elimination of all long-term idle wells.

(A) For the purposes of the plan required by this paragraph, elimination of an idle well shall be accomplished when the well has been properly abandoned in accordance with Section 3208, or it has been shown to the division's satisfaction that, since the well became an idle well, the well has maintained production of oil or gas or been used for injection for a continuous six-month period.

(B) A plan filed pursuant to this paragraph shall meet all of the following requirements and conditions:

(i) The plan shall specify the time period that it covers. The plan and any renewal of the plan shall cover a time period of no more than five years and shall be subject to approval by the supervisor who may prioritize the order in which idle wells are addressed.

(ii) The plan shall be reviewed for performance annually by the supervisor, and be subject to amendment by the supervisor, or by the operator with the approval of the supervisor.

(iii) The required rate of long-term idle well elimination shall be based upon the number of idle wells under the control of an operator on January 1 of each year, as specified in clause (iv). The supervisor may require additional well testing requirements as part of the plan.

(iv) Unless and until the operator has no long-term idle wells, the plan shall require that operators with 250 or fewer idle wells eliminate at least 4 percent of their long-term idle wells each year, and, in no case, less than one long-term idle well; operators with 251 to 1,250, inclusive, idle wells eliminate at least 5 percent of their long-term idle wells each year, and, in no case, less than one long-term idle well; and operators with more than 1,250 idle wells eliminate at least 6 percent of their long-term idle wells each year, and, in no case, less than one long-term idle well.

(v) An operator who fails to comply with the plan, as determined by the supervisor after the annual performance review, is not eligible to use the requirements of this paragraph, for purposes of compliance with this section, for any of its idle wells. That operator may not propose a new idle well plan for the next five years. An operator may appeal to the director pursuant to Article 6 (commencing with Section 3350) regarding the supervisor's rejection of a plan and plan amendments and the supervisor's determination of the operator's failure to comply with a plan. If the supervisor's determination that the operator failed to comply with the plan is not timely appealed, or if the director upholds the supervisor's determination upon appeal, then the operator shall immediately file the fees required under paragraph (1) for each year that the operator failed to comply with the plan.

(b) All fees received under this section shall be deposited in the Hazardous and Idle-Deserted Well Abatement Fund, which is hereby created in the State Treasury. Notwithstanding Section 13340 of the Government Code, the moneys in the Hazardous and Idle-Deserted Well Abatement Fund are hereby continuously appropriated to the department for expenditure without regard to fiscal year, to mitigate a hazardous or potentially hazardous condition, by well plugging and abandonment, decommissioning the attendant production facilities, or both, at a well of an operator subject to the requirements of this section.

(c) Failure to file, for any well, the fee required under this section shall be conclusive evidence of desertion of the well, permitting the supervisor to order the well abandoned pursuant to Section 3237.

(d) Nothing in this section prohibits a local agency from collecting a fee for regulation of wells.

(e) This section shall become operative on January 1, 2018.

3206.5 (a) Any city or county may request from the supervisor a list of those wells within its jurisdiction which have not continuously produced oil or natural gas, or have not been utilized continuously for injection purposes for a six-month period during any consecutive 10-year period prior to or after January 1, 1991.

(b) After receiving the list from the supervisor, the city or county may identify idle wells within its jurisdiction which it has determined, based on a competent, professional

evaluation, have no reasonable expectation of being reactivated, and formally request the supervisor to make a determination whether the wells should be plugged and abandoned.

(c) Upon receiving the written request of a city or county, as specified in subdivision (b):

(1) The supervisor may, within 60 days of receiving a written request from a city or county, require the operator or operators to file a statement for each well outlining those reasons why the wells should not be plugged and abandoned.

(2) The supervisor shall, within 120 days of receiving a written request, make a determination as to whether any of these wells should be plugged and abandoned, pursuant to the criteria contained in this chapter.

(d) Failure of the operator to file, for any well, the statement required under this section shall be conclusive evidence of desertion of the well, thereby permitting the supervisor to order the well abandoned.

3207. (a) Any individual or blanket indemnity bond issued in compliance with this chapter may be terminated and canceled and the surety relieved of all obligations thereunder when the well or wells covered by such bond have been properly abandoned pursuant to Section 3208, or another valid bond has been substituted therefor. Should the person who has filed a blanket bond properly abandon a portion of his or her wells covered by the bond, the bond may be terminated and canceled and the surety relieved of all obligations thereunder upon the filing by such person of an individual bond for each well that is still not abandoned. Liability as to individual wells that have been properly abandoned under a blanket bond may also be terminated.

(b) This section shall become operative on January 1, 2018.

3208. (a) For the purposes of Sections 3206 and 3207, a well is properly abandoned when it has been shown, to the satisfaction of the supervisor, that all proper steps have been taken to isolate all oil-bearing or gas-bearing strata encountered in the well, and to protect underground or surface water suitable for irrigation or farm or domestic purposes from the infiltration or addition of any detrimental substance and to prevent subsequent damage to life, health, property, and other resources. For purposes of this subdivision, proper steps include the plugging of the well, decommissioning the attendant production facilities of the well, or both, if determined necessary by the supervisor.

(b) This section shall become operative on January 1, 2018.

3208.1. (a) To prevent, as far as possible, damage to life, health, and property, the supervisor or district deputy may order, or permit, the reabandonment of any previously abandoned well if the supervisor or the district deputy has reason to question the integrity of the previous abandonment, or if the well is not accessible or visible.

(b) The operator responsible for plugging and abandoning deserted wells under Section 3237 shall be responsible for the reabandonment except in the following situations:

(1) The supervisor finds that the operator plugged and abandoned the well in conformity with the requirements of this division in effect at the time of the plugging and abandonment and that the well in its current condition presents no immediate danger to life, health, and property but requires additional work solely because the owner of the property on which the well is located proposes construction on the property that would prevent or impede access to the well for purposes of remedying a currently perceived

future problem. In this situation, the owner of the property on which the well is located shall obtain all rights necessary to reabandon the well and be responsible for the reabandonment.

(2) The supervisor finds that the operator plugged and abandoned the well in conformity with the requirements of this division in effect at the time of the plugging and abandonment and that construction over or near the well preventing or impeding access to it was begun on or after January 1, 1988, and the property owner, developer, or local agency permitting the construction failed either to obtain an opinion from the supervisor or district deputy as to whether the previously abandoned well is required to be reabandoned or to follow the advice of the supervisor or district deputy not to undertake the construction. In this situation, the person or entity causing the construction over or near the well shall be responsible for the reabandonment.

(3) The supervisor finds that the operator plugged and abandoned the well in conformity with the requirements of this division in effect at the time of the plugging and abandonment and after that time someone other than the operator or an affiliate of the operator disturbed the integrity of the abandonment in the course of developing the property, and the supervisor is able to determine based on credible evidence, including circumstantial evidence, the party or parties responsible for disturbing the integrity of the abandonment. In this situation, the party or parties responsible for disturbing the integrity of the abandonment shall be responsible for the reabandonment.

(c) For purposes of this section, being responsible for the reabandonment means that the responsible party or parties shall complete the reabandonment and be subject to the requirements of this chapter as an operator of the well. The responsible party or parties shall file with the supervisor the appropriate bond or security in an amount specified in Section 3204, 3205, or 3205.1. If the reabandonment is not completed, the supervisor may act under Section 3226 to complete the work.

(d) Except for the situations listed in paragraphs (1), (2), and (3) of subdivision (b), nothing in this section precludes the application of Article 4.2 (commencing with Section 3250) when its application would be appropriate.

3209. The provisions of Section 3207 as to termination and cancellation shall also apply to all bonds which have been heretofore filed with the supervisor as then provided by law.

4. Types of surety accepted: Cash and indemnity bond. PRC 3205.5
5. Conditions of bond: Required when an operator is about to drill, redrill, deepen or permanently alter a well; operate a commercial Class II disposal well; acquire an idle well; or maintain an idle well - (Idle is defined as five or more years.)
 - a. Individual bond (Amount per well): \$25,000 for each well less than 10,000 feet deep; \$40,000 for each well 10,000 or more feet deep; \$5,000 for each idle well (the bond for idle wells is one of several options for compliance under PRC 3206). PRC 3204 and 3206.

- b. Blanket bond: A blanket bond is only an option for an operator who engages in the drilling, redrilling, deepening, or in any operation permanently altering the casing, of 20 or more wells at any time. The amount of blanket bond is as follows: \$200,000 for any operator having fewer than 50 wells in the state, which does not include the bond or fee required in Section 3206; \$400,000 for any operator having 50 or more wells in the state, which does not include the bond or fee required in Section 3206; or \$2,000,000, which does include the bond or fee required in Section 3206. PRC 3205

Land Leasing Information

The State Lands Commission controls leasing of oil and gas production on State Lands. Information is attached.

1. Leasing method:
2. Notice method:
3. Minimum bidding \$ (per acre):
4. Qualification of the bidder:
5. State statutes:
6. Maximum acres:
7. Royalty rates:
8. Agency in control of leasing:

California State Lands Commission Leasing information For Oil and Gas Lease

All leases issued by the State Lands Commission for oil and gas development are subject to the provisions of the Public Resources Code (P.R.C.) sections 6801 to 6879 (enclosed). These statutes require that all leases for oil and gas development be issued by competitive bidding unless the criteria of P.R.C. section 6815 are met. The information provided by the applicant in this application for an oil and gas lease will be used to determine whether such lease is in the public interest and whether the lands sought for development are suitable for competitive bid or negotiated leasing. Should it be determined that the lands are available for competitive bid leasing, the staff will request that the applicant nominate the lands for competitive leasing. However, if the applicant does not nominate the lands, then the staff will recommend to the Commission that the application be denied. A nomination of public lands for competitive bidding is not considered an "application" for the purposes of sections 65920 et seq. of the Government Code. A detailed description of the competitive bidding process will be sent to the nominator as soon as a determination has been made. The nominator (applicant) will be required to pay all environmental, special studies and other costs incurred before the lands will be placed for bidding. If the

nominator is not the successful bidder, these costs will be reimbursed from the lease sale. Applications for oil and gas leases shall include the following:

1. Copies of all geological and geophysical data (e.g., well logs, histories, surveys, test data and other related data) covering the area. This information should be of sufficient detail to enable the staff to determine the extent of State ownership and/or participation and to support a recommendation to the Commission for such leasing.
2. On the Project Location maps (Part II, Section A of the Application Form) include:
 - a. Location(s) of drillsite(s) and proposed bottom hole location(s).
 - b. Size of drillsite(s).
 - c. Anticipated minimum and maximum development (if known).
 - d. Proposed access route(s) to the drillsite(s).
3. Statement of proposed drilling program including anticipated timetable or schedule.
4. Description of type (electric or diesel) of drilling rig(s) and structure(s) to be used. Include a discussion of types and amounts of air emissions expected to be produced (if known).
5. Method for obtaining utilities (e.g., fresh water, electricity, gas, fuel).
6. Discussion of associated development projects (e.g., storage and treating facilities, pipelines).
7. Contingency plan for controlling oil spills.

When specifically requested by the staff, data for the preparation of a plan for the control of subsidence and the prevention of pollution which might occur as a result of the proposed oil and gas operation.

Setbacks

1. What rules/regulations/policies does your jurisdiction have in regard to well setbacks from private residences and/or other habitable structures for use by humans or animals? N/A
2. Are there other sources of information on this matter that you could identify? N/A

Spacing

1. Spacing requirements: Yes. PRC 3600-3609; see also Code of Regulations 1721-1721.9

PRC CHAPTER 3. SPACING OF WELLS AND COMMUNITY LEASES

3600. Except as otherwise provided in this chapter, any well hereafter drilled for oil or gas, or hereafter drilled and permitted to produce oil or gas, which is located within 100 feet of an outer boundary of the parcel of land on which the well is situated, or within 100 feet of a public street or road or highway dedicated prior to the commencement of drilling

of the well, or within 150 feet of either a well being drilled or a well theretofore drilled which is producing oil or gas or a well which has been drilled and is not producing but which is capable of producing oil or gas, is a public nuisance.

3601. Where several contiguous parcels of land in one or different ownerships are operated as a single oil or gas lease or operating unit, the term "outer boundary line" means the outer boundary line of the lands included in the lease or unit. In determining the contiguity of any such parcels of land, no street, road or alley lying within the lease or unit shall be deemed to interrupt such contiguity.

3602. Where a parcel of land contains one acre or more, but is less than 250 feet in width, there may be drilled on the parcel of land not more than one well to each acre of the area if the surface location of any well or wells is so placed as to be as far from the lateral boundary lines of the parcel of land as the configuration of the surface and the existing improvements thereon will permit.

3602.1. Where a parcel of land contains one acre or more and the hydrocarbons to be developed are too heavy or viscous to produce by normal means, and the supervisor so determines, the supervisor may approve proposals to drill wells at whatever locations he deems advisable for the purpose of the proper development of such hydrocarbons by the application of pressure, heat or other means for the reduction of oil viscosity, and such wells shall not be classed as public nuisances after approval by the supervisor.

3602.2. In determining the area of parcels of land for the purposes of this chapter, the area of the oil and gas mineral estate shall be used exclusively.

3603. For the purposes of this chapter, an alley which intersects or lies within any block or other subdivision unit is not a public street or road.

3604. Each day in which the drilling of any well is carried on, or on which it is permitted to produce oil or gas in violation of this chapter is a separate nuisance.

3605. The provisions of this chapter do not apply to any field producing oil or gas on August 14, 1931.

3606. Notwithstanding any other provisions of this chapter, where a parcel of land contains one acre or more and where all or substantially all of the surface of such parcel of land is unavailable for the surface location of oil or gas wells, there may be drilled or produced not more than one well into each acre of such parcel of land, and the surface location of such well may be located upon property which may or may not contain one acre or more of surface area, and the property upon the surface of which the surface location of such well may be located may or may not be contiguous to such parcel of land; provided:

1. No operator shall construct or maintain any derrick within 150 feet of any other derrick, then standing, of such operator unless approved in advance by the supervisor

who may, in granting such approval, attach such conditions as are reasonably necessary to carry out the purposes of this chapter.

2. The surface location of such well, as measured from the center of the hole, shall be not less than 25 feet from an outer boundary of the surface of the property upon which such well is located, and shall be not less than 25 feet from any dedicated public street, road or highway which is so dedicated and in such public use at the time of the commencement of drilling of such well.

3. The producing interval of such well shall be not less than 75 feet from an outer boundary of the parcel of land into which such producing interval is drilled, and the producing interval of such well shall be not less than 150 feet, as measured horizontally in the same zone, from the producing interval of any other well which is producing or capable of producing oil or gas. If the parcel of land qualified to be drilled under this section is less than 150 feet in width, the producing interval of such well shall be as far from the lateral boundary lines of the property as is practicable. To enforce the provisions of this section, the supervisor may require, at the time supervisor gives approval of notice of intention to drill, redrill or deepen, that a subsurface directional survey be made for such well, and that a plat of said directional survey be filed with the supervisor within fifteen (15) days of completion.

3606.1. The 150-foot restriction in Sections 3600 and elsewhere in this chapter shall apply only to wells drilled and producing from the same zone or pool; provided, however, that the well density shall not exceed one well per acre unless the supervisor shall determine that more than one zone or pool underlies the property and that it is not practical to produce from all of such zones or pools from a single well per acre and that such other zones or pools are being drained by offset wells. In such cases only, a maximum density of two wells per acre may be approved. These exceptions to the general spacing rule shall apply also to properties qualifying under Sections 3602 and 3606.

3607. The prohibition set forth in Section 3600 against drilling within 100 feet of any public street or highway shall not apply in the case of any street or highway which is opened through a field in which drilling was commenced prior to the opening of the street or highway.

3608. Where land aggregating less than one acre is surrounded by other lands, which other lands are subject to an oil and gas lease aggregating one acre or more, and if, under the provisions of Sections 3600 to 3607, inclusive, of the Public Resources Code, the drilling or producing of a well on said land is declared to be a public nuisance, said land shall, for oil and gas development purposes and to prevent waste and to protect the oil and gas rights of landowners, be deemed included in said oil and gas lease on said other lands, and shall be subject to all the terms and provisions thereof, when the State Oil and Gas Supervisor has caused to be recorded with the county recorder of the county in which said land aggregating less than one acre is located a declaration as hereinafter provided. A request for inclusion of surrounded land aggregating less than one acre may be filed with the supervisor at any time by either the lessee of such other lands or by the owner or

lessee of such surrounded land or the supervisor may act upon his own motion. Before filing such request the lessee of such other lands shall make a reasonable effort to include each parcel of surrounded land, within the oil and gas lease upon such other lands.

There shall be attached to such request a statement which shall set forth the name or names of the record owner or record owners of said land aggregating less than one acre which is to be included in said oil and gas lease on said other lands, the legal description of said land aggregating less than one acre, name of the lessee of the oil and gas lease in which such land is to be included, and a reference to the book and page of the official records of the county recorder where such oil and gas lease is recorded or a reference to the document number and date of recordation of such oil and gas lease. Within 20 days following receipt of such request and attached statement, the supervisor shall cause to be recorded with the county recorder of the county in which said land aggregating less than one acre is located, a declaration, signed by him or his assistant or deputy, that said land is deemed by the provisions of this section to be included in said oil and gas lease on said other lands. Such declaration shall set forth the same information required to be set forth in the statement attached to the request, and a copy thereof shall be mailed or otherwise delivered by the supervisor to the lessee. The county recorder shall accept such declaration for recordation and shall index such declaration in the names of all persons or corporations mentioned therein. From the time of recording thereof in the office of the county recorder such notice shall impart constructive notice of the contents thereof to all persons dealing with the land therein described.

The owners of the oil and gas mineral rights in said land so deemed included in said oil and gas lease on said other lands, as herein provided, shall thereafter receive in money, based upon the production of oil and gas from the leasehold including said land or land unitized or pooled therewith, a pro rata share of the landowners' royalty determined in accordance with the provisions of said oil and gas lease in the proportion that the area of said land bears to the aggregate of the total area covered by said oil and gas lease including the area of said land or as otherwise provided in said lease; provided further, that said owners of said oil and gas mineral rights in said land shall in no case receive less than their pro rata share determined, as herein provided, of the value of one-eighth part of the oil and gas produced, saved and sold from or allocated to the operating unit comprising said leasehold on said other lands and said land, computed in accordance with the provisions of said oil and gas lease with respect to the computation of landowners' royalty; provided further that upon recordation of the statement by the supervisor, the owners of such oil and gas mineral rights in such land shall also receive a pro rata share of any other benefits thereafter accruing to the owners of the oil and gas mineral rights under the terms of the oil and gas lease on such other lands; and provided further, that without the consent of said owners of said land the lessee or operator of said oil and gas leasehold shall have no right to use the surface of said land nor to use the subsurface thereof down to a depth of 200 feet below the surface thereof.

Where said land aggregating less than one acre is surrounded by lands which are not subject to a single oil and gas lease but is surrounded by lands which are subject to two or more separate oil and gas leases, one or more of which oil or gas leases aggregates one

acre or more, then in such event the said land aggregating less than one acre shall, as herein provided, be included within and be joined to that oil and gas lease aggregating one acre or more as to which said parcel of land aggregating less than one acre has the longest common boundary. If there is no longest common boundary, the request shall designate the lease, aggregating one acre or more, into which the parcel aggregating less than one acre shall be included by the declaration of the supervisor; otherwise the supervisor shall make such designation.

In determining the contiguity of any parcels of land for the purposes hereof, no road, street or alley shall be deemed to interrupt such contiguity.

3608.1. The owner or operator of any leasehold, into which land has been included under the provisions of Section 3608, shall cause to be recorded an appropriate quitclaim to such land in the proper county recorder's office when such leasehold has been terminated.

3609. Notwithstanding any other provisions of this chapter, if the supervisor determines, pursuant to rules and regulations and after a public hearing, that the development of a pool discovered after the effective date of this section for the production of oil and gas, or either, requires the adoption of a well-spacing pattern other than that specified in Sections 3600 to 3608.1, inclusive, in order to prevent waste and to increase the ultimate economic recovery of oil or gas, he may adopt a well-spacing plan to apply to the surface and subsurface of a designated pool. Such plan shall be applicable to all wells thereafter drilled or redrilled into such pool. Such plan may include a requirement that, as a prerequisite to approval to drill or redrill a well, all or certain specified parcels of land shall be included in a pooling or unit agreement. The supervisor may provide in the rules and regulations for mandatory pooling agreements in connection with the well-spacing order.

- a. Density: One well per acre for fields producing after August 14, 1931, or as approved or ordered by the Supervisor for pools discovered after Jan. 1, 1974. PRC 3602, 3605.
- b. Lineal: See PRC 3600-3606.1 does not apply to fields producing on August 14, 1931. Applies to both oil and gas wells.

2. Exceptions:

- a. Basis: For drilling islands and developing heavy hydrocarbons that necessitate closer well spacing. PRC 3602.1.
- b. Approval: Through appeal to the State Oil and Gas Supervisor. PRC 3602.1.

Pooling

1. Authority to establish voluntary: Yes
2. Authority to establish compulsory: Under certain conditions (following petition to adopt a well-spacing plan other than that stated in PRC 3600-3608.1).

Unitization

1. Compulsory unitization of all or part of a pool or common source of supply: Yes, provisions as described in PRC 3630-3659. (For areas located in fields that have been producing for more than 20 years only.)
2. Minimum percentage of voluntary agreement before approval of compulsory unitization:
 - a. Working interest: 75%
 - b. Royalty interest: 75%

Drilling Permit

1. Permits required for:
 - a. Drilling a producing or service well: Yes. [PRC 3203](#)

[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 10 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 has failed 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 has failed to pay a civil penalty, remedy a violation that it is required to remedy to

the satisfaction of the supervisor pursuant to an order issued under Section 3236.5, or to pay any charges assessed under Article 7 (commencing with Section 3400), the supervisor may deny approval to the operator's proposed well operations until the operator pays the civil penalty, remedies the violation to the satisfaction of the supervisor, or pays the charges assessed under Article 7 (commencing with Section 3400).

- b. Seismic drilling: No. (Permitting may be required by local agencies.)
- c. Recompletion: Yes. [PRC 3203](#)
- d. Plugging and abandoning: Yes. [PRC 3229](#)

PRC 3229. Before commencing any work to abandon any well, the owner or operator shall file with the supervisor or the district deputy a written notice of intention to abandon the well. Abandonment shall not proceed until approval is given by the supervisor or the district deputy. If the supervisor or the district deputy does not give the owner or operator a written response to the notice of intention within 10 working days, the proposed abandonment shall be deemed to have been approved and the notice of intention shall for the purposes of this chapter be deemed a written report of the supervisor. If abandonment operations have not commenced within one year of receipt of the notice of intention, the notice of intention shall be deemed canceled.

2. Permit fee: None

- a. Drilling: None
- b. Seismic drilling: None
- c. Recompletion: None
- d. Plugging and abandoning: None

3. Require filing report of work performed: Yes. PRC 3215 & 3232

[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 the provisions of 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 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.

3232. The supervisor or the district deputy shall, within 10 days after the receipt of a written report of abandonment, furnish the owner or operator with a written final approval of abandonment, or a written disapproval of abandonment, setting forth the conditions upon which the disapproval is based.

Failure to abandon in accordance with the approved method of abandonment, or failure to notify the supervisor or the district deputy of any test required by the final approval of abandonment to be witnessed by the supervisor, the district deputy, or his or her inspector, or failure to furnish the supervisor or the district deputy, at his or her request, with any information regarding the condition of the well, shall constitute sufficient grounds for disapproval of the abandonment.

4. Sundry notices used: Yes. Notice of Intention to Drill New Well ó Oil and Gas; Notice of Intention to Rework / Redrill Well; Notice of Intention to Abandon Well ó Oil and Gas

Vertical Deviation

1. Regulation requirement: Yes
 - a. When is a directional survey necessary: Yes. (PRC 3606)
 - b. Filing of survey required: For all wells drilled directionally
 - c. Format of filing: Yes. (PRC 3215).

Casing and Tubing

(See California Code of Regulations 1722.2-1722.4(onshore) and 1744.1-1744.3(offshore)).

1. Minimum amount required:
 - a. Surface casing: Yes.
 - b. Production casing: Yes, when required. (Barefoot completions are still permitted.)
2. Minimum amount of cement required:

- a. Surface casing: Fill annular space from shoe to the surface.
 - b. Production casing: Yes. At least 500 feet fill above oil and gas zones and anomalous pressure intervals, and to at least 100 feet above the base of freshwater zone.
 - c. Setting time: No.
3. Tubing requirements:
- a. Oil wells: No.
 - b. Gas wells: No.

Spill Contingency Plan

PRC 3270.1. Within three months of its acquisition of a production facility or at the time of the initial production at its production facility, the facility operator shall file with the division a spill contingency plan. (See also Code of Regulations 1722.9)

Hydraulic Fracturing

1. Permitting: Yes. PRC 3160(d)

[3160\(d\)](#)

(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 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 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.

(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.

- a. Before drilling: Yes. (PRC 3203).
- b. Before fracing: Yes. (PRC 3160(d)).
- c. How long before: Not specified. A well stimulation treatment shall not be performed on any well without a valid permit that the supervisor or district deputy has approved. Additionally, a well stimulation treatment may not commence before 30 calendar days after the permit copies and required notices are provided to any surface property owners or tenants entitled to notice under PRC 3160(d)(6).

2. Reporting requirements: Yes. PRC 3160(b)(2); 3160(g); 3210-3216.

3160(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 required to be collected pursuant to rules and regulations adopted under [PRC 3160(b)(2)], 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.

- The date of the well stimulation treatment.
- A complete list of the names, Chemical Abstract Service (CAS) numbers [or other unique identifier if a CAS number does not exist], and maximum concentration, in percent by mass, of each and every chemical constituent of the well stimulation treatment fluids used.
- The trade name, the supplier, concentration, and a brief description of the intended purpose of each additive contained in the well stimulation treatment fluid.
- 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.
- The source, volume, and specific composition and disposition of all water, including, but not limited to, all water used as base fluid during the 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.
- The specific composition and disposition of all well stimulation treatment fluids, including waste fluids, other than water.
- 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.
- The radioactivity of the recovered well stimulation fluids.
- 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.]

PRC 3210-3216 (applicable to all wells, not just those subject to well stimulation treatment)

3210. The owner or operator of any well shall keep, or cause to be kept, a careful and accurate log, core record, and history of the drilling of the well.

3211. The log shall show the character and depth of the formation passed through or encountered in the drilling of the well. The log shall show completely the amounts, kinds, and size of casing used, the depth at which oil-bearing or gas-bearing strata are encountered, the depth and character of the strata, and whether all water overlying and underlying the oil-bearing or gas-bearing strata was successfully and permanently shut off so as to prevent the percolation or penetration of water into the oil-bearing or gas-bearing strata; and whether strata bearing water that might be suitable for irrigation or domestic purposes are properly protected from the infiltration or addition of detrimental substances from the well.

3212. The core record shall show the depth, character, and fluid content of cores obtained, so far as determined.

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.

3214. The log shall be kept in the local office of the owner or operator, and, together with the tour reports of the owner or operator, shall be subject, during business hours, to the inspection of the supervisor, the district deputy, or the director.

3215. (copied above)

3216. The owner or operator of any well, or his local agent, shall file with the supervisor a copy of the log, history, and core record, or any portion thereof, at any time after the commencement of the work of drilling any well upon written request of the supervisor, or the district deputy. The request shall be signed by the supervisor, or the district deputy, and served either personally, or by mailing a copy of the request, by registered mail, to the last known post office address of the owner or operator, or his agent.

3. Where reported: Reporting requirements under PRC 3210-3216 are reported to the appropriate district office of the Division. (PRC 3215(a).) Reporting requirements under PRC 3160(g) are reported to an internet website designated or maintained by the Division (see PRC 3160(g)(2).)
4. When reported: 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. 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.
5. Source water requirements: The well stimulation treatment permit application shall identify the anticipated source of the water to be used in the treatment (PRC 3160(d)(1)(C)(ii)).
 - a. Mechanical integrity: The statute does not specify additional requirements unique to well stimulation treatment. Permanent regulations forthcoming in 2015.
 - b. Cementing log required: Yes. (PRC 3211; 3213); regulations forthcoming in 2015.
 - c. Pressure testing: Regulations forthcoming in 2015.
 - d. Pressure monitoring: Regulations forthcoming in 2015.
 - e. Blowout preventer required: Yes. PRC 3219; see also Code of Regulations 1722.5. Any person engaged in operating any oil or gas well wherein high pressure gas is known to exit, and any person drilling for oil or gas in any district where the pressure of oil or gas is unknown shall equip the well with

casings of sufficient strength, and with such other safety devices as may be necessary, in accordance with methods approved by the supervisor, and shall use every effort and endeavor effectually to prevent blowouts, explosions, and fires.

6. Disposal of flowback fluids: The well stimulation treatment permit application shall identify the disposal method identified for the recovered water in the flowback fluid from the treatment that is not produced water (PRC 3160(d)(1)(C)(iii).)
 - a. Retaining pits: Not specified in statute.
 - b. Tanks: Not specified in statute.
 - c. Approved discharge to surface water: Not specified in statute.
 - d. Underground injection: Not specified in statute.
7. Chemical disclosure requirement:
 - a. Mandatory: Yes. See PRC 3160(b)(2) and PRC 3160(g).
 - b. Where disclosed: To an internet website designated or maintained by the Division (see PRC 3160(g)(2).) Regulations forthcoming in 2015.
 - c. When disclosed (pre-fracing, post-fracing, both): Both. Chemical disclosure is required to be included in the application for a permit to perform well stimulation treatment under PRC 3160(d). Additionally, PRC 3160(g)(1) requires chemical disclosure to a Division-designated internet website within 60 days following cessation of a well stimulation treatment on a well.
 - d. Time limit to disclose: Within 60 days following cessation of a well stimulation treatment. (PRC 3160(g)(1).)
 - e. Information required to be disclosed: See PRC 3160(b)(2). The information required to be collected under PRC 3160(b)(2) will be further defined regulations forthcoming in 2015.
 - f. Trade secret protection: PRC 3160(j), (k)

3160(i)

(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:

(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 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 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.

- g. Required disclosure to health/emergency personnel: See PRC 3160(j)(10), above.

Underground Injection

1. Agencies that control the underground injection of fluid by well class:
The Division of Oil, Gas, and Geothermal Resources is the lead agency for the regulation of Class II injection wells. The U.S. Environmental Protection Agency delegated federal authority to the Division in 1983. The State's Regional Water Quality Control Boards regulate surface disposal.

Class 2: California Division of Oil, Gas & Geothermal Resources
Class 6: US EPA

Completion

1. Completion report required: Yes. (PRC 3215)
 - a. Time limit: Within 60 days after completion.
 - b. Where submitted: To the appropriate district office of the Division of Oil, Gas, and Geothermal Resources.
2. Well logs required to be filed: Yes. (PRC 3215)
 - a. Time limit: Within 60 days after such completion.
 - b. Where submitted: To the appropriate district office of the Division of Oil, Gas, and Geothermal Resources.
 - c. Confidential time period: If requested. (PRC 3234). Not to exceed two years for onshore exploratory wells and not to exceed five years for offshore exploratory wells. Period may be extended for exploratory and offshore wells upon a showing of extenuating circumstances.

Development wells may be granted confidential status if the Supervisor determines there are extenuating circumstances.

3234 (a) (1) Except as otherwise provided in this section, all the well records, including production reports, of any owner or operator which are filed pursuant to this chapter are public records for purposes of the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code).

(2) Those records are public records when filed with the division unless the owner or operator requests, in writing, that the division maintain the well records of onshore exploratory wells or offshore exploratory wells as confidential information. The records of other wells may be maintained as confidential information if, based upon information in a written request of the owner or operator, the supervisor determines there are extenuating circumstances. For onshore wells, the confidential period shall not exceed two years from the cessation of drilling operations as defined in subdivision (e). For offshore wells, the confidential period shall not exceed five years from the cessation of drilling operations as specified in subdivision (e).

(3) Well records maintained as confidential information by the division shall be open to inspection by those persons who are authorized by the owner or operator in writing. Confidential status shall not apply to state officers charged with regulating well operations, the director, or as provided in subdivision (c).

(4) On receipt by the supervisor of a written request documenting extenuating circumstances relating to a particular well, including a well on an expired or terminated lease, the supervisor may extend the period of confidentiality for six months. For onshore wells, the total period of confidentiality, including all extensions, shall not exceed four years from the cessation of drilling operations as specified in subdivision (e), and for offshore wells the total period of confidentiality, including all extensions, shall not exceed seven years from the cessation of drilling operations as specified in subdivision (e), unless the director approves a longer period after a 30-day public notice and comment period. The director shall initiate and conduct a public hearing on receipt of a written complaint.

(b) Notwithstanding the provisions of subdivision (a) regarding the period of confidentiality, the well records for onshore and offshore wells shall become public records when the supervisor is notified that the lease has expired or terminated.

(c) Production reports filed pursuant to Section 3227 shall be open to inspection by the State Board of Equalization or its duly appointed representatives when making a survey pursuant to Section 1815 of the Revenue and Taxation Code or when valuing state-assessed property pursuant to Section 755 of the Revenue and Taxation Code, and by the assessor of the county in which a well referred to in Section 3227 is located.

(d) For the purposes of this section, well records does not include either experimental logs and tests or interpretive data not generally available to all operators, as defined by the supervisor by regulation.

d. Available for public use: Yes

- e. Log catalog available: Yes
- 3. Multiple completion regulation: No
 - a. Approval obtained: N/A
- 4. Commingling in well bore: Yes
 - a. Approval obtained: Commingled production could be stopped if it is proven that such practices are detrimental to the pools

Oil Production

1. Definition of an oil well: PRC 3008

3008 (a) "Well" means any oil or gas well or well for the discovery of oil or gas; any well on lands producing or reasonably presumed to contain oil or gas; any well drilled for the purpose of injecting fluids or gas for stimulating oil or gas recovery, repressuring or pressure maintenance of oil or gas reservoirs, or disposing of waste fluids from an oil or gas field; any well used to inject or withdraw gas from an underground storage facility; or any well drilled within or adjacent to an oil or gas pool for the purpose of obtaining water to be used in production stimulation or repressuring operations.

(b) "Prospect well" or "exploratory well" means any well drilled to extend a field or explore a new, potentially productive reservoir.

(c) "Active observation well" means a well being used for the sole purpose of gathering reservoir data, such as pressure or temperature in a reservoir being currently produced or injected by the operator. For a well to be an active observation well, the operator shall demonstrate to the division's satisfaction that the well fulfills a need for gathering reservoir data, and the operator shall provide the division with a summary report of the type of data collected at least annually or as requested by the division.

(d) "Idle well" means any well that has had 24 consecutive months of not either producing oil or natural gas, producing water to be used in production stimulation, enhanced oil recovery, or reservoir pressure management, or being used for injection. For the purpose of determining whether a well is an idle well, production or injection is subject to verification by the division. An idle well continues to be an idle well until it has been properly abandoned in accordance with Section 3208 or it has been shown to the division's satisfaction that, since the well became an idle well, the well has for a continuous six-month period either maintained production of oil or natural gas, maintained production of water used in production stimulation, enhanced oil recovery, or reservoir pressure management, or been used for injection.

(e) "Long-term idle well" means any well that has been an idle well for eight or more years.
2. Potential tests required: PRC 3206.1.

3206.1 (a) By June 1, 2018, the division shall review, evaluate, and update its regulations pertaining to idle wells. The update shall include idle well testing and management requirements that, at a minimum, include all of the following:

(1) Appropriate testing, as determined by the supervisor, to determine whether the fluid level is above the base of an underground source of drinking water.

(2) Appropriate testing, as determined by the supervisor, to verify the mechanical integrity of the well.

(3) Appropriate remediation, as determined by the supervisor, of idle wells if there is an indication of a lack of mechanical integrity.

(4) For a well that has been an idle well for 15 years or more, an engineering analysis demonstrating to the division's satisfaction that it is viable to return the idle well to operation in the future.

(b) If the operator demonstrates to the division's satisfaction that the well is not within one-half mile of an underground source of drinking water, testing required under the regulations implementing this section shall not be required until at least two years after the well becomes an idle well. This subdivision shall not be construed to prohibit or limit any other testing required under this chapter.

(c) At the discretion of the supervisor, the regulations implementing this section may provide an option for temporary or partial well abandonment in lieu of compliance with the requirements of the regulations implementing this section.

(d) If the operator does not remediate an idle well as required by the regulations implementing this section, or the operator does not demonstrate that an idle well is economically viable as required by the regulations implementing this section, then the operator shall plug and abandon the idle well in accordance with Section 3208.

(e) Failure to file to comply with the requirements of the regulations implementing this section shall be conclusive evidence of desertion of the well, permitting the supervisor to order the well abandoned pursuant to Section 3237.

(f) For purposes of this section, an "underground source of drinking water" has the same meaning as in the federal Safe Drinking Water Act (42 U.S.C. Sec. 300f).

a. Time interval: No

b. Witness required: No

3. Maximum gas-oil ratio: Yes. Field rules are established.

- a. Provision for limiting gas-oil ratio: Yes. (PRC 3307). Such production that may be considered unreasonable waste of natural gas. (PRC 3300-3314).
- c. Exception to limiting gas-oil ratio: Yes, unusual circumstances.
- 4. Bottom-hole pressure test reports required: Yes, if BHP recordings are made.
 - d. Periodical bottom-hole pressure surveys: Same as above.
- 5. Commingling oil in common facilities: Yes
- 6. Measurement involving meters: Yes
- 7. Production reports:
 - a. By lease: No
 - b. By well: Yes. [PRC 3227](#)
 - c. Time limit: Within 30 days of end of reporting month

Gas Production

- 1. Definition of a gas well: A well producing nonassociated gas.
- 2. Pressure base 14.73 psia @ 60 degrees F.
- 3. Initial potential tests: No.
 - a. Time interval: N/A
 - b. Witness required: N/A
- 4. Bottom-hole pressure test reports required: Yes, if BHP recordings are made.
 - a. Periodical bottom-hole pressure surveys: Same as above
- 5. Commingling of gas in common facilities: Yes
- 6. Measurement involving meters: Yes
- 7. Production reports:
 - a. By lease: No
 - b. By well: Yes. [PRC 3227](#)
 - c. Time limits: Within 30 days of end of reporting month.