California

Department of Conservation

Oil, Gas, & Geothermal Resources

STATUTES & REGULATIONS

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CALIFORNIA STATUTES

NOTE: *Parenthetical notes that follow each code section are incomplete code history containing only the most recent amendment, or if there are no amendments, the date of enactment.*

CIVIL CODE

DIVISION 2. Property

PART 2. Real or Immovable Property

TITLE 3. Rights and Obligations of Owners

CHAPTER 2. Obligations of Owners

§ 848. (a) Except as provided in subdivision (c), the owner of mineral rights, as defined by Section 883.110, in real property shall give a written notice prior to the first entry to the owner of the real property who is listed as the assessee on the current local assessment roll or to the owner's representative, or to the lessee of the real property if different from the mineral rights owner, and to any public utility that has a recorded interest in the real property if there is to be excavation of the utility interest, under the following circumstances:

(1) If the mineral rights owner or its agent intends to enter real property for the purpose of undertaking non-surface-disrupting activities such as surveying, water and mineral testing, and removal of debris and equipment not involving use of an articulated vehicle on the real property, the owner or agent shall provide a minimum of five days' notice. Reasonable attempts shall be made to deliver the notice by acknowledged personal delivery, but if that cannot occur, the notice shall be delivered by registered letter and be received a minimum of five days prior to the entrance on the property. The notice shall specify all of the following:

(A) Date of entry.

(B) Estimated length of time the property will be occupied.

(C) General nature of the work.

(2) If the mineral rights owner or its agent intends to enter real property for the purpose of excavation or other surface-disrupting activities such as drilling new wells, constructing structures, bringing articulated vehicles or excavation equipment on the real property, or reclamation of the real property after the surface has been disturbed, the owner or agent shall provide a minimum of 30 days' notice. The notice shall specify both of the following:

(A) The extent and location of the prospecting, mining, or extraction operation.

(B) The approximate time or times of entry and exit upon the real property.

(3) If a mineral rights owner's entry to the real property ceases for a period of one year or more, any further entry by the mineral rights owner for the purpose of surface-disturbing activities pursuant to paragraph (2) shall require written notice pursuant to this subdivision.

(b) (1) If a mineral rights owner has been authorized by the Division of Oil, Gas, and Geothermal Resources to drill a relief well or to take other immediate actions in response to an emergency situation, or if the division or its agent is drilling a relief well or taking other immediate actions in response to an emergency situation, the notice provisions under paragraph (2) of subdivision (a) shall be waived.

(2) For purposes of this subdivision, an “emergency” means immediate action is necessary to protect life, health, property, or natural resources.

(c) The notice specified in subdivision (a) shall not be required if the owner of the real property or assessee has a current, already negotiated surface use, access use, or similar agreement with the mineral rights owner, lessee, agent, or operator.

(d) If the mineral rights owner has not complied with the notice requirement specified in subdivision (a), the owner of the real property listed on the current assessment roll or any public utility which has a recorded interest in the real property may request a court to enjoin the prospecting, mining, or extracting operation until the mineral rights owner has complied. The absence of a known owner on the assessment roll or any public utility which has a recorded interest in the real property relieves the mineral rights owner of the obligation to give the written notice to the owner or public utility.

(e) For purposes of this section, an “acknowledged personal delivery” means that the written notice is personally delivered to the owner, the owner’s representative, or lessee, and the owner, the owner’s representative, or lessee acknowledges, in writing, receipt of the notice.
(Amended by Stats. 2012, Ch. 542, Sec. 1. Effective January 1, 2013.)

TITLE 5. Marketable Record Title

CHAPTER 3. Mineral Rights

Article 1. General Provision

§ 883.110. As used in this chapter, “mineral right” means an interest in minerals, regardless of character, whether fugacious or nonfugacious, organic or inorganic, that is created by grant or reservation, regardless of form, whether a fee or lesser interest, mineral, royalty, or leasehold, absolute or fractional, corporeal or incorporeal, and includes express or implied appurtenant surface rights.
(Added by Stats. 1984, Ch. 240, Sec. 2.)

CODE OF CIVIL PROCEDURE

PART 2. OF CIVIL ACTIONS

TITLE 14. Of Miscellaneous Provisions

CHAPTER 2. Bonds and Undertakings

Article 7. Deposit in Lieu of Bond

§ 995.710. (a) Except to the extent the statute providing for a bond precludes a deposit in lieu of bond or limits the form of deposit, the principal may, instead of giving a bond, deposit with the officer any of the following:

(1) Lawful money of the United States. The money shall be maintained by the officer in an interest-bearing trust account.

(2) Bearer bonds or bearer notes of the United States or the State of California.

(3) Certificates of deposit payable to the officer, not exceeding the federally insured amount, issued by banks authorized to do business in this state and insured by the Federal Deposit Insurance Corporation or by savings and loan associations authorized to do business in this state and insured by the Federal Savings and Loan Insurance Corporation.

(4) Savings accounts assigned to the officer, not exceeding the federally insured amount, together with evidence of the deposit in the savings accounts with banks authorized to do business in this state and insured by the Federal Deposit Insurance Corporation.

(5) Investment certificates or share accounts assigned to the officer, not exceeding the federally insured amount, issued by savings and loan associations authorized to do business in this state and insured by the Federal Savings and Loan Insurance Corporation.

(6) Certificates for funds or share accounts assigned to the officer, not exceeding the guaranteed amount, issued by a credit union, as defined in Section 14002 of the Financial Code, whose share deposits are guaranteed by the National Credit Union Administration or guaranteed by any other agency approved by the Department of Corporations.

(b) The deposit shall be in an amount or have a face value, or in the case of bearer bonds or bearer notes have a market value, equal to or in excess of the amount that would be required to be secured by the bond if the bond were given by an admitted surety insurer. Notwithstanding any other provision of this chapter, in the case of a deposit of bearer bonds or bearer notes other than in an action or proceeding, the officer may, in the officer's discretion, require that the amount of the deposit be determined not by the market value of the bonds or notes but by a formula based on the principal amount of the bonds or notes.

(c) The deposit shall be accompanied by an agreement executed by the principal authorizing the officer to collect, sell, or otherwise apply the deposit to enforce the liability of the principal on the deposit. The agreement shall include the address at which the principal may be served with notices, papers, and other documents under this chapter.

(d) The officer may prescribe terms and conditions to implement this section.

(e) This section does not apply to deposits with the Secretary of State.
(Amended by Stats. 2014, Ch. 305, Sec. 1. Effective January 1, 2015.)

§ 995.720. (a) The market value of bonds or notes, including bearer bonds and bearer notes, shall be agreed upon by stipulation of the principal and beneficiary or, if the bonds or notes are given in an action or proceeding and the principal and beneficiary are unable to agree, the market value shall be determined by court order in the manner prescribed in this section. A certified copy of the stipulation or court order shall be delivered to the officer at the time of the deposit of the bonds or notes.

(b) If the bonds or notes are given in an action or proceeding, the principal may file a written application with the court to determine the market value of the bonds or notes. The application shall be served upon the beneficiary and proof of service shall be filed with the application. The application shall contain all of the following:

(1) A specific description of the bonds or notes.

(2) A statement of the current market value of the bonds or notes as of the date of the filing of the application.

(3) A statement of the amount of the bonds or notes that the principal believes would be equal to the required amount of the deposit.

(c) The application pursuant to subdivision (b) shall be heard by the court not less than five days or more than 10 days after service of the application. If at the time of the hearing no objection is made to the current market value of the bonds or notes alleged in the application, the court shall fix the amount of the bonds or notes on the basis of the market value alleged in the application. If the beneficiary contends that the current market value of the bonds or notes is less than alleged in the application, the principal shall offer evidence in support of the application, and the beneficiary may offer evidence in opposition. At the conclusion of the hearing, the court shall make an order determining the market value of the bonds or notes and shall fix and determine the amount of the bonds or notes to be deposited by the principal.
(Amended by Stats. 2014, Ch. 305, Sec. 2. Effective January 1, 2015.)

§ 995.730. A deposit given instead of a bond has the same force and effect, is treated the same, and is subject to the same conditions, liability, and statutory provisions, including provisions for increase and decrease of amount, as the bond.
(Added by Stats. 1982, Ch. 998, Sec. 1.)

§ 995.740. If no proceedings are pending to enforce the liability of the principal on the deposit, the officer shall:

(a) Pay quarterly, on demand, any interest on the deposit, when earned in accordance with the terms of the account or certificate, to the principal.

(b) Deliver to the principal, on demand, any interest coupons attached to bonds or notes, including bearer bonds and bearer notes, as the interest coupons become due and payable, or pay annually any interest payable on the bonds or notes.
(Amended by Stats. 2014, Ch. 305, Sec. 3. Effective January 1, 2015.)

§ 995.750. (a) The principal shall pay the amount of the liability on the deposit within 30 days after the date on which the judgment of liability becomes final.

(b) If the deposit was given to stay enforcement of a judgment on appeal, the principal shall pay the amount of the liability on the deposit, including damages and costs awarded against the principal on appeal, within 30 days after the filing of the remittitur from the appellate court in the court from which the appeal is taken.

(Added by Stats. 1982, Ch. 998, Sec. 1.)

§ 995.760. (a) If the principal does not pay the amount of the liability on the deposit within the time prescribed in Section 995.750, the deposit shall be collected, sold, or otherwise applied to the liability upon order of the court that entered the judgment of liability, made upon five days' notice to the parties.

(b) Bonds or notes, including bearer bonds and bearer notes, without a prevailing market price shall be sold at public auction. Notice of sale shall be served on the principal. Bonds or notes having a prevailing market price may be sold at private sale at a price not lower than the prevailing market price.

(c) The deposit shall be distributed in the following order:

(1) First, to pay the cost of collection, sale, or other application of the deposit.

(2) Second, to pay the judgment of liability of the principal on the deposit.

(3) Third, the remainder, if any, shall be returned to the principal.

(Amended by Stats. 2014, Ch. 305, Sec. 4. Effective January 1, 2015.)

§ 995.770. A deposit given pursuant to this article shall be returned to the principal at the earliest of the following times:

(a) Upon substitution of a sufficient bond for the deposit. The bond shall be in full force and effect for all liabilities incurred, and for acts, omissions, or causes existing or which arose, during the period the deposit was in effect.

(b) The time provided by Section 995.360 for return of a bond.

(c) The time provided by statute for return of the deposit.

(Added by Stats. 1982, Ch. 998, Sec. 1.)

CHAPTER 5. Notices, and Filing and Service of Papers

§ 1013. (a) In case of service by mail, the notice or other paper shall be deposited in a post office, mailbox, subpost office, substation, or mail chute, or other like facility regularly maintained by the United States Postal Service, in a sealed envelope, with postage paid, addressed to the person on whom it is to be served, at the office address as last given by that person on any document filed in the cause and served on the party making service by mail; otherwise at that party's place of residence. Service is complete at the time of the deposit, but any period of notice and any right or duty to do any act or make any response within any period

or on a date certain after service of the document, which time period or date is prescribed by statute or rule of court, shall be extended five calendar days, upon service by mail, if the place of address and the place of mailing is within the State of California, 10 calendar days if either the place of mailing or the place of address is outside the State of California but within the United States, and 20 calendar days if either the place of mailing or the place of address is outside the United States, but the extension shall not apply to extend the time for filing notice of intention to move for new trial, notice of intention to move to vacate judgment pursuant to Section 663a, or notice of appeal. This extension applies in the absence of a specific exception provided for by this section or other statute or rule of court.

(b) The copy of the notice or other paper served by mail pursuant to this chapter shall bear a notation of the date and place of mailing or be accompanied by an unsigned copy of the affidavit or certificate of mailing.

(c) In case of service by Express Mail, the notice or other paper must be deposited in a post office, mailbox, subpost office, substation, or mail chute, or other like facility regularly maintained by the United States Postal Service for receipt of Express Mail, in a sealed envelope, with Express Mail postage paid, addressed to the person on whom it is to be served, at the office address as last given by that person on any document filed in the cause and served on the party making service by Express Mail; otherwise at that party's place of residence. In case of service by another method of delivery providing for overnight delivery, the notice or other paper must be deposited in a box or other facility regularly maintained by the express service carrier, or delivered to an authorized courier or driver authorized by the express service carrier to receive documents, in an envelope or package designated by the express service carrier with delivery fees paid or provided for, addressed to the person on whom it is to be served, at the office address as last given by that person on any document filed in the cause and served on the party making service; otherwise at that party's place of residence. Service is complete at the time of the deposit, but any period of notice and any right or duty to do any act or make any response within any period or on a date certain after service of the document served by Express Mail or other method of delivery providing for overnight delivery shall be extended by two court days. The extension shall not apply to extend the time for filing notice of intention to move for new trial, notice of intention to move to vacate judgment pursuant to Section 663a, or notice of appeal. This extension applies in the absence of a specific exception provided for by this section or other statute or rule of court.

(d) The copy of the notice or other paper served by Express Mail or another means of delivery providing for overnight delivery pursuant to this chapter shall bear a notation of the date and place of deposit or be accompanied by an unsigned copy of the affidavit or certificate of deposit.

(e) Service by facsimile transmission shall be permitted only where the parties agree and a written confirmation of that agreement is made. The Judicial Council may adopt rules implementing the service of documents by facsimile transmission and may provide a form for the confirmation of the agreement required by this subdivision. In case of service by facsimile transmission, the notice or other paper must be transmitted to a facsimile machine maintained by the person on whom it is served at the facsimile machine telephone number as last given by

that person on any document which he or she has filed in the cause and served on the party making the service. Service is complete at the time of transmission, but any period of notice and any right or duty to do any act or make any response within any period or on a date certain after service of the document, which time period or date is prescribed by statute or rule of court, shall be extended, after service by facsimile transmission, by two court days, but the extension shall not apply to extend the time for filing notice of intention to move for new trial, notice of intention to move to vacate judgment pursuant to Section 663a, or notice of appeal. This extension applies in the absence of a specific exception provided for by this section or other statute or rule of court.

(f) The copy of the notice or other paper served by facsimile transmission pursuant to this chapter shall bear a notation of the date and place of transmission and the facsimile telephone number to which transmitted, or to be accompanied by an unsigned copy of the affidavit or certificate of transmission which shall contain the facsimile telephone number to which the notice or other paper was transmitted.

(g) Electronic service shall be permitted pursuant to Section 1010.6 and the rules on electronic service in the California Rules of Court.

(h) Subdivisions (b), (d), and (f) are directory.

(Amended by Stats. 2010, Ch. 156, Sec. 2. Effective January 1, 2011.)

GOVERNMENT CODE

TITLE 2. Government of the State of California

DIVISION 1. General

CHAPTER 7. California Emergency Services Act

Article 5. California Emergency Management Agency

§ 8589.7. (a) In carrying out its responsibilities pursuant to subdivision (b) of Section 8574.17, the California Emergency Management Agency shall serve as the central point in state government for the emergency reporting of spills, unauthorized releases, or other accidental releases of hazardous materials and shall coordinate the notification of the appropriate state and local administering agencies that may be required to respond to those spills, unauthorized releases, or other accidental releases. The California Emergency Management Agency is the only state agency required to make the notification required by subdivision (b).

(b) Upon receipt of a report concerning a spill, unauthorized release, or other accidental release involving hazardous materials, as defined in Section 25501 of the Health and Safety Code, or concerning a rupture of, or an explosion or fire involving, a pipeline reportable pursuant to Section 51018, the California Emergency Management Agency shall immediately inform the following agencies of the incident:

(1) For an oil spill reportable pursuant to Section 8670.25.5, the Office of Emergency Services shall inform the administrator for oil spill response, the State Lands Commission, the California Coastal Commission, and the California regional water quality control board having jurisdiction over the location of the discharged oil.

(2) For a rupture, explosion, or fire involving a pipeline reportable pursuant to Section 51018, the California Emergency Management Agency shall inform the State Fire Marshal.

(3) For a discharge in or on any waters of the state of a hazardous substance or sewage reportable pursuant to Section 13271 of the Water Code, the Office of Emergency Services shall inform the appropriate California regional water quality control board.

(4) For a spill or other release of petroleum reportable pursuant to Section 25270.8 of the Health and Safety Code, the California Emergency Management Agency shall inform the local administering agency that has jurisdiction over the spill or release.

(5) For a crude oil spill reportable pursuant to Section 3233 of the Public Resources Code, the California Emergency Management Agency shall inform the Division of Oil, Gas, and Geothermal Resources and the appropriate California regional water quality control board.

(c) This section does not relieve a person who is responsible for an incident specified in subdivision (b) from the duty to make an emergency notification to a local agency, or the 911 emergency system, under any other law.

(d) A person who is subject to Section 25507 of the Health and Safety Code shall immediately report all releases or threatened releases pursuant to that section to the appropriate local administering agency and each local administering agency shall notify the California Emergency Management Agency and businesses in their jurisdiction of the appropriate emergency telephone number that can be used for emergency notification to the administering agency on a 24-hour basis. The administering agency shall notify other local agencies of releases or threatened releases within their jurisdiction, as appropriate.

(e) No facility, owner, operator, or other person required to report an incident specified in subdivision (b) to the California Emergency Management Agency shall be liable for any failure of the California Emergency Management Agency to make a notification required by this section or to accurately transmit the information reported.

(Amended by Stats. 2013, Ch. 352, Sec. 141. Effective September 26, 2013. Operative July 1, 2013, by Sec. 543 of Ch. 352.)

TITLE 5. Local Agencies

DIVISION 1. Cities and Counties

PART 1. Powers and Duties Common to Cities and Counties

CHAPTER 5.5. The Elder California Pipeline Safety Act of 1981

§ 51010.5. As used in this chapter, the following definitions apply:

(a) “Pipeline” includes every intrastate pipeline used for the transportation of hazardous liquid substances or highly volatile liquid substances, including a common carrier pipeline, and all piping containing those substances located within a refined products bulk loading facility which is owned by a common carrier and is served by a pipeline of that common carrier, and the common carrier owns and serves by pipeline at least five such facilities in the state. “Pipeline” does not include the following:

(1) An interstate pipeline subject to Part 195 of Title 49 of the Code of Federal Regulations.

(2) A pipeline for the transportation of a hazardous liquid substance in a gaseous state.

(3) A pipeline for the transportation of crude oil that operates by gravity or at a stress level of 20 percent or less of the specified minimum yield strength of the pipe.

(4) Transportation of petroleum in onshore gathering lines located in rural areas.

(5) A pipeline for the transportation of a hazardous liquid substance offshore located upstream from the outlet flange of each facility on the Outer Continental Shelf where hydrocarbons are produced or where produced hydrocarbons are first separated, dehydrated, or otherwise processed, whichever facility is farther downstream.

(6) Transportation of a hazardous liquid by a flow line.

(7) A pipeline for the transportation of a hazardous liquid substance through an onshore production, refining, or manufacturing facility, including a storage or inplant piping system associated with that facility.

(8) Transportation of a hazardous liquid substance by vessel, aircraft, tank truck, tank car, or other vehicle or terminal facilities used exclusively to transfer hazardous liquids between those modes of transportation.

(b) “Flow line” means a pipeline which transports hazardous liquid substances from the well head to a treating facility or production storage facility.

(c) “Hydrostatic testing” means the application of internal pressure above the normal or maximum operating pressure to a segment of pipeline, under no-flow conditions for a fixed period of time, utilizing a liquid test medium.

(d) “Local agency” means a city, county, or fire protection district.

(e) “Rural area” means a location which lies outside the limits of any incorporated or unincorporated city or city and county, or other residential or commercial area, such as a subdivision, a business, a shopping center, or a community development.

(f) “Gathering line” means a pipeline eight inches or less in nominal diameter that transports petroleum from a production facility.

(g) “Production facility” means piping or equipment used in the production, extraction, recovery, lifting, stabilization, separation, or treatment of petroleum or associated storage or measurement. (To be a production facility under this definition, piping or equipment must be used in the process of extracting petroleum from the ground and transporting it by pipeline.)

(h) “Public drinking water well” means a wellhead that provides drinking water to a public water system as defined in Section 116275 of the Health and Safety Code, that is regulated by the State Department of Health Services and that is subject to Section 116455 of the Health and Safety Code.

(i) “GIS mapping system” means a geographical information system that will collect, store, retrieve, analyze, and display environmental geographical data in a data base that is accessible to the public.

(j) “Motor vehicle fuel” includes gasoline, natural gasoline, blends of gasoline and alcohol, or gasoline and oxygenates, and any inflammable liquid, by whatever name the liquid may be known or sold, which is used or is usable for propelling motor vehicles operated by the explosion type engine. It does not include kerosene, liquefied petroleum gas, or natural gas in liquid or gaseous form.

(k) “Oxygenate” means an organic compound containing oxygen that has been approved by the United States Environmental Protection Agency as a gasoline additive to meet the requirements for an “oxygenated fuel” pursuant to Section 7545 of Title 42 of the United States Code.

(Amended by Stats. 1997, Ch. 814, Sec. 1. Effective January 1, 1998.)

§ 51018. (a) Every rupture, explosion, or fire involving a pipeline, including a pipeline system otherwise exempted by subdivision (a) of Section 51010.5, and including a pipeline undergoing testing, shall be immediately reported by the pipeline operator to the fire department having fire suppression responsibilities and to the Office of Emergency Services. In addition, the pipeline operator shall within 30 days of the rupture, explosion, or fire file a report with the State Fire Marshal containing all the information that the State Fire Marshal may reasonably require to prepare the report required pursuant to subdivision (d).

(b) (1) The Office of Emergency Services shall immediately notify the State Fire Marshal of the incident, who shall immediately dispatch his or her employees to the scene. The State Fire Marshal or his or her employees, upon arrival, shall provide technical expertise and advise the operator and all public agencies on activities needed to mitigate the hazard.

(2) For purposes of this subdivision, the Legislature does not intend to hinder or disrupt the workings of the “incident commander system,” but does intend to establish a recognized element of expertise and direction for the incident command to consult and acknowledge as an authority on the subject of pipeline incident mitigation. Furthermore, it is expected that the State Fire Marshal will recognize the expertise of the pipeline operator and any other emergency agency personnel who may be familiar with the particular location of the incident and respect their knowledgeable input regarding the mitigation of the incident.

(c) For purposes of this section, “rupture” includes every unintentional liquid leak, including any leak that occurs during hydrostatic testing, except that a crude oil leak of less than five barrels from a pipeline or flow line in a rural area, or any crude oil or petroleum product leak in any in-plant piping system of less than five barrels, when no fire, explosion, or bodily injury results or no waterway is contaminated thereby, does not constitute a rupture for purposes of the reporting requirements of subdivision (a).

(d) The State Fire Marshal shall, every fifth year commencing in 1999, issue a report identifying pipeline leak incident rate trends, reviewing current regulatory effectiveness with regard to pipeline safety, and recommending any necessary changes to the Legislature. This report shall include all of the following: total length of regulated pipelines, total length of regulated piggable pipeline, total number of line sections, average length of each section, number of leaks during study period, average spill size, average damage per incident, average age of leak pipe, average diameter of leak pipe, injuries during study period, cause of the leak or spill, fatalities during study period, and other information as deemed appropriate by the State Fire Marshal.

(e) This section does not preempt any other applicable federal or state reporting requirement.

(f) Except as otherwise provided in this section and Section 8589.7, a notification made pursuant to this section shall satisfy any immediate notification requirement contained in any permit issued by a permitting agency.

(g) This section does not apply to pipeline ruptures involving nonreportable crude oil spills under Section 3233 of the Public Resources Code, unless the spill involves a fire or explosion.
(Amended by Stats. 2013, Ch. 356, Sec. 7. Effective September 26, 2013.)

TITLE 7. Planning and Land Use

DIVISION 1. Planning and Zoning

CHAPTER 4.5. Review and Approval of Development Projects

Article 2. Definitions

§ 65925. Unless the context otherwise requires, the definitions in this article govern the construction of this chapter.
(Added by Stats. 1977, Ch. 1200.)

§ 65926. “Air pollution control district” means any district created or continued in existence pursuant to the provisions of Part 3 (commencing with Section 40000) of Division 26 of the Health and Safety Code.
(Added by Stats. 1977, Ch. 1200.)

§ 65927. "Development" means, on land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the Government Code), and any other division of land except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511 of the Public Resources Code).

As used in this section, "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.
Nothing in this section shall be construed to subject the approval or disapproval of final subdivision maps to the provisions of this chapter.

"Development" does not mean a "change of organization", as defined in Section 56021 or a "reorganization", as defined in Section 56073.
(Amended by Stats. 1992, Ch. 1003, Sec. 1. Effective January 1, 1993.)

§ 65928. "Development project" means any project undertaken for the purpose of development. "Development project" includes a project involving the issuance of a permit for construction or reconstruction but not a permit to operate. "Development project" does not include any ministerial projects proposed to be carried out or approved by public agencies.
(Amended by Stats. 1978, Ch. 1113.)

§ 65928.5. "Geothermal field development project" means a development project as defined in Section 65928 which is composed of geothermal wells, resource transportation lines, production equipment, roads, and other facilities which are necessary to supply geothermal energy to any particular heat utilization equipment for its productive life, all within an area delineated by the applicant.
(Added by Stats. 1978, Ch. 1271.)

§ 65929. "Lead agency" means the public agency which has the principal responsibility for carrying out or approving a project.
(Added by Stats. 1977, Ch. 1200.)

§ 65930. "Local agency" means any public agency other than a state agency. For purposes of this chapter, a redevelopment agency is a local agency and is not a state agency.
(Amended by Stats. 1978, Ch. 1113.)

§ 65931. "Project" means any activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.
(Added by Stats. 1977, Ch. 1200.)

§ 65932. "Public agency" means any state agency, any county, city and county, city, regional agency, public district, redevelopment agency, or other political subdivision.
(Added by Stats. 1977, Ch. 1200.)

§ 65933. "Responsible agency" means a public agency, other than the lead agency, which has responsibility for carrying out or approving a project.
(Added by Stats. 1977, Ch. 1200.)

§ 65934. "State agency" means any agency, board, or commission of state government. For all purposes of this chapter, the term "state agency" shall include an air pollution control district.
(Added by Stats. 1977, Ch. 1200.)

Article 6. Development Permits for Classes of Projects

§ 65960. Notwithstanding any other provision if law, if any person applies for approval of a geothermal field development prject, then only one permit from the lead agency and one permit from each responsible agency shall be required for all drilling, construction, operation, and maintenance activities required during the course of the productive life of the project, including, but not limited to, the drilling of makeup wells, redrills, well cleanouts, pipeline hookups, or any other activity necessary to the continued supply of geothermal steam to a powerplant. The lead agency and each responsible agency may approve such permits for less than full field development if the applicant submits such an application. Such permits shall include (1) any conditions or stipulations deemed necessary by the lead or responsible agency, including appropriate mitigation measures within the statutory jurisdiction of such agency, and (2) a monitoring program capable of assuring the permittee's conformance with all such conditions or stipulations. This section shall not apply to any permit whose issuance is a ministerial act by the permitting agency.
(Added by Stats. 1978, Ch. 1271.)

HEALTH AND SAFETY CODE

GENERAL PROVISIONS

§ 5. Unless the provision or the context otherwise requires, these definitions, rules of construction, and general provisions shall govern the construction of this code.
(Enacted by Stats. 1939, Ch. 60.)

§ 20. "State department" or "department" means State Department of Health Services. Commencing July 1, 2007, any reference to the former State Department of Health Services regarding a function vested by Chapter 2 (commencing with Section 131050) of Part 1 of Division 112, in the State Department of Public Health is deemed to, instead, refer to the State Department of Public Health, and any reference to the former State Department of Health Services regarding a function not vested by Chapter 2 (commencing with Section 131050) of Part 1 of Division 112, in the State Department of Public Health, is deemed to, instead, refer to the State Department of Health Care Services.
(Amended by Stats. 2006, Ch. 241, Sec. 8. Effective January 1, 2007. Operative July 1, 2007, by Sec. 37 of Ch. 241.)

DIVISION 20. Miscellaneous Health and Safety Provisions

CHAPTER 6.5. Hazardous Waste Control

Article 5.5. The Toxic Injection Well Control Act of 1985

§ 25159.10. The Legislature hereby finds and declares all of the following:

(a) Specific state laws and regulations have been enacted to prevent leaks and hazardous waste discharges to land, such as those from underground storage tanks, surface impoundments, pits, ponds, or lagoons.

(b) The present federal law which regulates the discharge of hazardous waste to land in injection wells is inadequate to fully protect California's water supplies from contamination. As a result, underground injection of hazardous waste presents a serious short-term and long-term threat to the quality of waters in the state.

(c) State-of-the-art design and operation safeguards of injection wells without adequate groundwater monitoring, specific geological information, and other system safeguards cannot guarantee that migration of hazardous wastes into underground sources of drinking water will not occur.

(d) Monitoring requirements specified in federal law are not adequate to detect all leaks from injection wells and there are no requirements in federal law for monitoring the movement of wastes in the substrata to ensure that wastes have not escaped the injection zone or are not reacting with, or have not breached the confining strata.

(e) Injecting wastes into wells deep in the geological substrata is an unproven method for the containment of wastes because, among other things, hazardous wastes can react with geological substrata, rendering these containment barriers ineffective, pressure of the injected wastes can breach containment layers, and active or abandoned wells in the vicinity of waste injection can serve as a conduit for the wastes to migrate to drinking water supplies.

(f) Restoring contaminated groundwater to its original state after the fact and removal or cleanup of wastes once injected to these depths are formidable tasks which are not typically economically feasible.

(g) It is in the public interest to establish a continuing program for the purpose of preventing contamination from underground injection of waste. It is the intent of the Legislature to prohibit any injection of hazardous wastes into or above drinking water in the state, and to prohibit any injection of hazardous waste below drinking water in the state which is not properly permitted and monitored so as to prevent hazardous wastes from migrating to drinking water or otherwise endangering the environment of the state.

(h) It is the intent of the Legislature that the Legislature will provide a process for the public and industry to appeal the actions or inactions of the department under this article. However, the specific process cannot be developed until the Legislature determines the general organization of the department with regard to administration of hazardous waste management programs.
(Added by Stats. 1985, Ch. 1591, Sec. 1.)

§ 25159.11. This article shall be known and may be cited as the Toxic Injection Well Control Act of 1985.
(Added by Stats. 1985, Ch. 1591, Sec. 1.)

§ 25159.12. For purposes of this article, the following definitions apply:

(a) “Annulus” means the space between the outside edge of the injection tube and the well casing.

(b) “State board” means the State Water Resources Control Board.

(c) “Compatibility” means that waste constituents do not react with each other, with the materials constituting the injection well, or with fluids or solid geologic media in the injection zone or confining zone in a manner as to cause leaching, precipitation of solids, gas or pressure buildup, dissolution, or any other effect that will impair the effectiveness of the confining zone or the safe operation of the injection well.

(d) “Confining zone” means the geological formation, or part of a formation, that is intended to be a barrier to prevent the migration of waste constituents from the injection zone.

(e) “Constituent” means an element, chemical, compound, or mixture of compounds that is a component of a hazardous waste or leachate and that has the physical or chemical properties that cause the waste to be identified as hazardous waste by the department pursuant to this chapter.

(f) “Discharge” means to place, inject, dispose of, or store hazardous wastes into, or in, an injection well owned or operated by the person who is conducting the placing, disposal, or storage.

(g) “Drinking water” has the same meaning as “potential source of drinking water,” as defined in subdivision (t) of Section 25208.2.

(h) “Facility” means the structures, appurtenances, and improvements on the land, and all contiguous land, that are associated with an injection well and are used for treating, storing, or disposing of hazardous waste. A facility may consist of several waste management units, including, but not limited to, surface impoundments, landfills, underground or aboveground tanks, sumps, pits, ponds, and lagoons that are associated with an injection well.

(i) “Groundwater” means water, including, but not limited to, drinking water, below the land surface in a zone of saturation.

(j) “Hazardous waste” means any hazardous waste specified as hazardous waste or extremely hazardous waste, as defined in this chapter. Any waste mixture formed by mixing any waste or substance with a hazardous waste shall be considered hazardous waste for the purposes of this article.

(k) “Hazardous waste facilities permit” means a permit issued for an injection well pursuant to Sections 25200 and 25200.6.

(l) “Injection well” or “well” means any bored, drilled, or driven shaft, dug pit, or hole in the ground the depth of which is greater than the circumference of the bored hole and any associated subsurface appurtenances, including, but not limited to, the casing. For the purposes of this article, injection well does not include either of the following:

(1) Wells exempted pursuant to Section 25159.24.

(2) Wells that are regulated by the Division of Oil and Gas in the Department of Conservation pursuant to Division 3 (commencing with Section 3000) of the Public Resources Code and Subpart F (commencing with Section 147.250) of Subchapter D of Chapter 1 of Part 147 of Title 40 of the Code of Federal Regulations and are in compliance with that division and Subpart A (commencing with Section 146.1) of Part 147 of Subchapter D of Chapter 1 of Title 40 of the Code of Federal Regulations.

(m) “Injection zone” means that portion of the receiving formation that has received, is receiving, or is expected to receive, over the lifetime of the well, waste fluid from the injection well. “Injection zone” does not include that portion of the receiving formation that exceeds the horizontal and vertical extent specified pursuant to Section 25159.20.

(n) “Owner” means a person who owns a facility or part of a facility.

(o) “Perched water” means a localized body of groundwater that overlies, and is hydraulically separated from, an underlying body of groundwater.

(p) “pH” means a measure of a sample’s acidity expressed as a negative logarithm of the hydrogen ion concentration.

(q) “Qualified person” means a person who has at least five years of full-time experience in hydrogeology and who is a professional geologist registered pursuant to Section 7850 of the Business and Professions Code, or a registered petroleum engineer registered pursuant to Section 6762 of the Business and Professions Code. “Full-time experience” in hydrogeology may include a combination of postgraduate studies in hydrogeology and work experience, with each year of postgraduate work counted as one year of full-time work experience, except that not more than three years of postgraduate studies may be counted as full-time experience.

(r) “Receiving formation” means the geologic strata that are hydraulically connected to the injection well.

(s) “Regional board” means the California regional water quality control board for the region in which the injection well is located.

(t) “Report” means the hydrogeological assessment report specified in Section 25159.18.

(u) “Safe Drinking Water Act” means Subchapter XII (commencing with Section 300f) of Chapter 6A of Title 42 of the United States Code.

(v) “Strata” means a distinctive layer or series of layers of earth materials.

(w) “Waste management unit” means that portion of a facility used for the discharge of hazardous waste into or onto land, including all containment and monitoring equipment associated with that portion of the facility.

(Amended by Stats. 2006, Ch. 538, Sec. 378. Effective January 1, 2007.)

§ 25159.15. (a) Notwithstanding any other provision of law, on or after January 1, 1986, a person shall not discharge hazardous waste into an injection well which commences operation on or after January 1, 1986, and after January 1, 1988, a person shall not discharge hazardous waste into an injection well which commenced operation before January 1, 1986, unless all of the following conditions are met:

(1) Unless granted an exemption pursuant to subdivision (b), no point along the length of the injection well, as measured either horizontally or vertically, is located within one-half mile of drinking water.

(2) The person has received a hazardous waste facilities permit for the well issued pursuant to Section 25200.6.

(3) The injection well does not discharge hazardous waste into or above a formation which contains a source of drinking water within one-half mile of the well.

(b) A person may apply to the department to exempt an injection well from paragraph (1) of subdivision (a) if the person has received a hazardous waste facilities permit and the person has filed a report pursuant to Section 25159.18 with the department on or before January 1, 1987, which has been approved by the department, pursuant to Section 25159.18. If the person proposes to commence operation of an injection well on or after January 1, 1986, the person shall file the request for an exemption and the report at least one year before any proposed discharge or injection.

(c) The department shall either grant or deny an exemption from paragraph (1) of subdivision (a) on or before December 31, 1987, or within one year after receipt of the application for a proposed injection well. The department may grant an exemption from paragraph (1) of subdivision (a) only if the department makes all of the following written findings, and supports these findings by citing specific evidence presented in the report or provided to the department:

(1) The hydrogeology report prepared pursuant to Section 25159.18 is current, accurate, and complete.

(2) No hazardous waste constituents have migrated from that portion of the injection well located above the injection zone or have migrated from the injection zone.

(3) Practical alternative technologies, other than well injection, do not exist to reduce, treat, or dispose of the hazardous wastes which are to be discharged.

(4) Continuing or commencing the operation of the injection well does not pose a potential of hazardous waste constituents migrating from that portion of the injection well located above the injection zone or migrating from the injection zone and a monitoring program pursuant to subdivision (c) of Section 25159.17 has been installed, or for a proposed injection well, the monitoring program has been designed and will be installed before any discharge or injections into the well.

(d) An exemption granted pursuant to subdivision (c) shall not be effective for more than five years. Applications for an exemption, or a renewal of an exemption, shall be accompanied by the fee specified in the fee schedules adopted by the department pursuant to Section 25159.19. The department shall not renew the exemption unless it makes all of the findings in subdivision (c).

(e) The department shall revoke an exemption granted pursuant to subdivision (c) if the department determines that there is migration of hazardous wastes, or a threat of migration of hazardous wastes, from the well into any strata or the waters of the state outside the injection zone. The department shall then prohibit the discharge of any hazardous waste into the injection well, require appropriate removal and remedial actions by the person granted the exemption, and require the responsible parties to take appropriate removal and remedial actions.

(f) The state board, the regional boards, and the department shall establish procedures providing for the interagency transfer and review of applications for exemption received pursuant to subdivision (b).

(g) This section applies only to injection wells into which hazardous waste is discharged. *(Amended by Stats. 1986, Ch. 1013, Sec. 1. Effective September 23, 1986.)*

§ 25159.16. (a) If the department or regional board determines that there is migration of hazardous waste constituents, or a threat of migration of hazardous waste constituents, from an injection well into any strata or waters of the state outside the injection zone, the department shall prohibit the discharge of any hazardous waste into the injection well until removal and remedial actions have been conducted to abate the migration or threat.

(b) The department shall determine, after the remedial and removal actions required pursuant to subdivision (a) are completed, whether the injection well should be continued to be used for the discharge of hazardous wastes. The department shall not approve the continued use of the injection well for the discharge of hazardous waste unless the department makes both of the following determinations:

(1) The removal or remedial action abated the contamination, or threat of contamination, from the migration or threat of migration.

(2) There is no potential, in continuing the operation of the injection well, for any future migration of hazardous waste constituents, from that portion of the injection well located above the injection zone, or from the injection zone.

The department shall make these determinations pursuant to a public hearing for which the department shall provide notice to all residents in the affected area, as determined by the department, and by mail to all persons listed on any mailing lists compiled by the department, using any appropriate mailing lists compiled by the regional board.

(c) If the department determines, pursuant to subdivision (b), that an injection well should not continue to be used for the discharge of hazardous wastes, the department shall require that all hazardous waste discharges be permanently terminated at the well and that the owner of the well take all actions necessary to prepare the injection well for closure pursuant to subdivision (d) and for postclosure maintenance which are required pursuant to the Federal Resource Conservation and Recovery Act of 1976 (42 U.S.C. Sec. 6901 et seq.), the regulations adopted by the United States Environmental Protection Agency pursuant to the Safe Drinking Water Act for proper closure, plugging, and monitoring of injection wells, and the regulations adopted by the state board and the department for closure of hazardous waste management units.

(d) Before any injection well used for the discharge of hazardous waste is closed, the department shall require the owner to certify that the well is in a state of static equilibrium, all defects or damages in the well casing are corrected prior to closure, that closure is sufficient to prevent the movement of fluids from the injection zone, and that all closure will commence within six months from the date the department orders closure. The injection well shall also be closed in accordance with the following requirements:

(1) Fluids and gases shall be confined to the stratum in which they occur by the use of cement grout or other suitable material. The amount, type, kind of material, and method of placement shall be approved by the department and the well shall be filled from bottom to top with the approved material.

(2) No well shall be sealed without the prior approval of the department. The person responsible for well closure shall submit a sealing plan to the department at least 90 days prior to the proposed date of sealing. The department may require that a representative of the department observe that sealing.

(e) The department shall consult with the regional board and the Division of Oil and Gas, where necessary, to fulfill the requirements of subdivision (d).

(f) This section applies only to injection wells into which hazardous waste is discharged. *(Amended by Stats. 1986, Ch. 1013, Sec. 2. Effective September 23, 1986.)*

§ 25159.17. (a) The department shall make an inspection at least once each year of all facilities with injection wells into which hazardous waste is discharged. The owner shall tabulate the monitoring data recovered, pursuant to subdivision (c), monthly. The department shall review the data specified in paragraphs (1), (2), and (3), of subdivision (c) monthly and the data specified in paragraph (4) of subdivision (c) quarterly to ensure that all injection wells into which hazardous waste is discharged comply with this chapter and that any equipment or programs required pursuant to this article are operating properly.

(b) The department shall require complete mechanical integrity testing of the well bore at least once a year and shall require pressure tests at least once every six months. The testing

program shall be designed to detect defects, damage, and corrosion in the well, well casings, injection tube, packer, cement, and the screened or perforated portion of the well.

(c) The operator of an injection well into which hazardous waste is discharged shall conduct monitoring of the surface equipment, the well, and the movement of injected wastes, in the following manner:

(1) Injection fluids shall be sampled and analyzed at least monthly to yield representative data of their characteristics at all injection wells located at onsite facilities. If the injection well is located at an offsite facility, the fluids shall be sampled and analyzed every time the composition of the hazardous waste discharged into the injection well is different than the waste discharged immediately prior to the new discharge.

(2) Pressure gauges shall be installed and maintained in proper operating condition at all times on the injection tubing and annulus.

(3) Continuous recording devices shall be installed and maintained in proper operating condition at all times to record injection temperatures and pressures, injection flow rates, injection volumes, and annulus pressure.

(4) The monitoring system, including all monitoring wells, shall be constructed and operated in accordance with the standards specified in subdivision (p) of Section 25159.18. The design of the monitoring system and location and number of monitoring wells shall be approved by the department. Monitoring wells shall be sufficient in number and location for compliance with the monitoring requirements specified in subdivision (p) of Section 25159.18, the federal regulations adopted pursuant to the Safe Drinking Water Act, and for determining all of the following:

(A) The direction and rate of regional groundwater movement.

(B) Any upward migration of hazardous wastes and changes in water quality in the water bearing formation immediately above the injection zone.

(C) Any changes in water quality of drinking water within at least one-half mile of the well.

(D) The direction, rate, hydraulic effects, alteration, and characteristics of wastes injected into the injection zone, and any changes of pressure within or above the injection zone.

(d) The operator of an injection well shall equip the surface facilities of an injection well into which hazardous waste is discharged with shutoff devices, alarms, and fencing.

(e) The department shall require all abandoned water wells within three miles of a facility to be closed in accordance with standards at least as stringent as those set forth in the Department of Water Resources Bulletin No. 74-81.

(f) The department may require any subsurface structure or hole which is contaminated, may become contaminated, provides a potential conduit for contamination, or penetrates a formation containing drinking water to be closed in accordance with standards at least as stringent as those set forth in the Department of Water Resources Bulletin No. 74-81. If the subsurface structure or hole is an oil or gas well, the well shall be closed in accordance with standards at least as stringent as the regulations adopted by the Division of Oil and Gas. If the subsurface structure is an injection well into which hazardous waste is discharged, the injection

well shall be closed in accordance with the procedures specified in subdivision (d) of Section 25159.16.

(g) The regional board shall revise any existing waste discharge requirements, issued for any injection well into which hazardous waste is discharged, pursuant to Section 13263 of the Water Code, based upon a review of the report.

(h) This section applies only to injection wells into which hazardous waste is discharged. *(Amended by Stats. 1986, Ch. 1013, Sec. 3. Effective September 23, 1986.)*

§ 25159.18. Any person who applies to the department for a hazardous waste facilities permit, or for the renewal or revision of a hazardous waste facilities permit, for the discharge of hazardous wastes into an injection well, including any proposed injection well, shall submit a hydrogeological assessment report to the department and to the appropriate regional board six months before making that application. A qualified person shall be responsible for the preparation of the report and shall certify its completeness and accuracy. The department shall not approve the report unless the department finds that the report is current, accurate, and complete, and that no hazardous waste constituents have migrated from the portion of the injection well located above the injection zone or have migrated from the injection zone. The report shall be accompanied by the fee established pursuant to Section 25159.19. The report shall contain, for each injection well, including any proposed injection well, any information required by the department, and all of the following information:

(a) A description of the injection well, including all of the following:

(1) Physical characteristics.

(2) A log of construction activities, including dates and methods used.

(3) A description of materials used in the injection well, including tubing, casing, packers, seals, and grout.

(4) Design specifications and a drawing of the well as completed.

(5) An analysis of the chemical and physical compatibility of the materials used with the wastes injected.

(6) Annulus fluid composition, level, and pressure at the time of well completion through the present time.

(b) A description of both of the following:

(1) The volume, temperature, pH, and radiological characteristics, and composition of hazardous waste constituents placed in the well, based on a statistically significant representative chemical analysis of each specific hazardous waste type, so that any variations in hazardous waste constituents over time are documented.

(2) The pressure and rate at which fluid is injected into the well.

(c) A map showing the distances, within the facility, to the nearest surface water bodies and springs, and the distances, within three miles from the facility's perimeter, to the nearest surface water bodies and springs.

(d) Tabular data from each surface water body and spring shown on the map specified in subdivision (c), within one mile from the facility's perimeter, which indicate its flow and a representative water analysis. The report shall include an evaluation and characterization of

seasonal changes and, if substantive changes occur from season to season, the tabular data shall reflect these seasonal changes.

(e) A map showing the location of all existing and abandoned wells, dry holes, mines, and quarries within the facility and within three miles of the facility's perimeter. The report shall include, for each well shown on the map, a description of the present use of the well, a representative water analysis from any existing wells, any known physical characteristics, and a determination as to whether the well, if abandoned, has been closed in accordance with standards at least as stringent as those set forth in the Department of Water Resources Bulletin No. 74-81, or, if the well is an oil or gas well, in accordance with standards at least as stringent as the regulations of the Division of Oil and Gas. The report also shall include, when possible, the water well driller's report or well log.

(f) A map showing the structural geology and stratigraphy within three miles of the facility's perimeter that can influence the direction of the groundwater flow or the movement of the discharged wastes. The report shall include a description of folds, domes, basins, faults, seismic activity, fractures, and joint patterns, and a geologic cross section and general description of the subsurface rock units, including stratigraphic position, lithology, thickness, and areal distribution.

(g) An analysis for all of the following:

(1) The vertical and lateral extent of any water-bearing strata that could be affected by leakage from the injection well.

(2) The vertical and lateral extent of any strata through which the well is drilled.

(3) The vertical and lateral limits of the confining beds above, below, and adjacent to, the injection well.

(h) The analysis specified in subdivision (g) shall include all of the following:

(1) A map and cross section of all hydrogeologic units.

(2) Maps showing contours of equal elevation of the water surface for perched water, unconfined water, and confined groundwater required to be analyzed by this subdivision.

(3) An estimate of the flow, and flow direction, of the water in all water-bearing formations shown on both the maps and the subsurface geologic cross sections.

(4) An estimate of the transmissivity, permeability, porosity, and storage coefficient for each perched zone of water and water-bearing formations identified on the maps specified in paragraph (1).

(5) A determination of the water quality of each zone of the water-bearing formations and perched water that is identified on the maps specified in paragraph (1) and is under, or above and adjacent to, the well. This determination shall be conducted by taking samples either upgradient of the injection well or from another location that has not been affected by leakage from the injection well.

(i) A determination as to whether the groundwater is contiguous with regional bodies of groundwater and the depth measured from the injection zone and well casing to the groundwater, including the depth measured to perched water and water-bearing strata identified on the maps specified in subdivision (h).

(j) All of the following information for the receiving formation:

(1) A description of the chemical and physical properties of the receiving formation, including its lithology, thickness, composition, structure, porosity, storage capacity, permeability, compressibility, density, subsurface stress, vertical and lateral continuity and extent, fluid temperature, pressure, composition, and the measurement of the minimum pressure that would fracture the receiving formation.

(2) The effect of the injection pressure on the receiving formation.

(3) The geologic stability and long-term integrity of the receiving formation.

(4) An assessment of compatibility of waste, formation fluids, and formation lithology. This shall include a description of short-range and long-range changes anticipated in the physical and chemical state of the receiving formation in its fluids through chemical reaction and interaction with injection fluids.

(k) All of the following information for the confining zone:

(1) A description of its chemical and physical properties, including its age, composition, thickness, vertical and lateral continuity, unconformities, permeability, transmissivity, compressibility, porosity, density, and subsurface stress.

(2) The minimum amount of pressure that would fracture the confining zone, calculated specifically for the particular confining zone, a description of the number and types of existing fractures, faults, and cavities, and an analysis as to whether fractures were created or enlarged by past injection of wastes.

(3) The geologic stability and long-term integrity of the confining zone.

(4) Anticipated short-range and long-range changes in the physical state of the confining zone through chemical reaction and interaction with injection fluids.

(5) An estimate of the rate of migration of the hazardous waste constituents through the confining zone.

(l) A geologic cross section and description of the composition of each stratum through which the injection well is drilled. This description shall include a physical, chemical, and hydrogeological characterization of both the consolidated and unconsolidated rock material, including lithology, mineralogy, texture, bedding, thickness, and permeability. It shall also include an analysis for pollutants, including those constituents discharged into the injection well. The report shall arrange all monitoring data in a tabular form so that the dates, the constituents, and the concentrations are readily discernible.

(m) A description of surface facilities, including, but not limited to, pressure gauges, automatic shutoff devices, alarms, fencing, specifications for valves and pipe fittings, and operator training and requirements.

(n) A description of contingency plans for well failures and shutdowns to prevent migration of contaminants from the well.

(o) A description of the monitoring being conducted to detect migration of hazardous waste constituents, including the number and positioning of the monitoring wells, the monitoring wells' distances from the injection well, the monitoring wells' design data, the monitoring wells' installation, the monitoring development procedures, the sampling and analytical methodologies, the sampling frequency, and the chemical constituents analyzed. The design data of the monitoring wells shall include the monitoring wells' depth, the monitoring wells'

diameters, the monitoring wells' casing materials, the perforated intervals within the well, the size of the perforations, the gradation of the filter pack, and the extent of the wells' annular seals.

(p) Documentation demonstrating that the monitoring system and methods used at the facility can detect any seepage, including any leaks, cracks, or malfunctions in the well or a breach of the confining zone, before the hazardous waste constituents migrate from the well above the injection zone or from the confining zone. This documentation shall include, but is not limited to, substantiation of all of the following:

(1) The monitoring system is effective enough, and includes a sufficient number of monitoring wells in the major water-bearing zones, which are located close enough to the injection well casing and to the injection zone, to verify that no lateral and vertical migration of any constituents discharged into the well is occurring outside of the injection zone.

(2) Monitoring wells are not located within the influence of any adjacent pumping wells that might impair their effectiveness.

(3) Monitoring wells are only screened in the aquifer to be monitored and are monitored for both pressure and water quality.

(4) The chosen casing material does not adversely react with the potential contaminants of major concern at the facility.

(5) The casing diameter allows an adequate amount of water to be removed during sampling and allows full development of the monitor well.

(6) Monitoring wells are constructed so as not to provide potential conduits for migration of pollution, and the wells' construction features, including annular seals, prevent pollutants from migrating up or down the monitoring well.

(7) The methods of water sample collection require that the samples are transported and handled in accordance with the United States Geological Survey's "National Handbook of Recommended Methods for Water-Data Acquisition," which provides guidelines for collection and analysis of groundwater samples for selected unstable constituents and any additional procedures specified by the department. For all monitoring wells, except those extending into the injection zone, the sample shall be collected after at least five well volumes have been removed from the well.

(8) The hazardous waste constituents selected for analysis are specific to the facility, taking into account the chemical composition of hazardous wastes previously discharged into the injection well. The monitoring data shall be arranged in tabular form so that the date, the constituents, and the concentrations are readily discernible.

(9) The frequency of monitoring is sufficient to give timely warning of migration of hazardous waste constituents so that remedial action can be taken prior to any adverse changes in the quality of the groundwater.

(10) A written statement from the qualified person preparing the report indicating whether any constituents have migrated into the surface water bodies or any strata outside the injection zone, including water-bearing strata.

(11) A written statement from the qualified person preparing the report indicating whether any migration of hazardous waste constituents into surface water bodies or any strata

outside the injection zone, including water-bearing strata, is likely or not likely to occur within five years, and any evidence supporting that statement.

(q) This section applies only to injection wells into which hazardous waste is discharged. *(Amended by Stats. 1994, Ch. 146, Sec. 108. Effective January 1, 1995.)*

§ 25159.19. (a) On or before July 1, 1986, the department shall, by emergency regulation, adopt a fee schedule that assesses a fee upon any person discharging any hazardous wastes into an injection well. The department shall include in this fee schedule the fees charged for filing a hazardous waste injection statement specified in former Section 25159.13, as added by Chapter 1591 of the Statutes of 1985, the report specified in Section 25159.18, and applications for, and renewals of, the exemptions specified in Section 25159.15. The department shall also include provisions in the fee schedule for assessing a penalty pursuant to subdivision (c). These fees shall be based on the reasonable anticipated costs that will be incurred by the department to implement and administer this article. The department may also request an appropriation to be used in combination with these fees to perform the monitoring, inspections, review of reports, or any other implementation and administrative actions required by this article.

(b) The emergency regulations that set the fee schedule shall be adopted by the department in accordance with Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, and for the purposes of that chapter, including Section 11349.6 of the Government Code, the adoption of these regulations is an emergency and shall be considered by the Office of Administrative Law as necessary for the immediate preservation of the public peace, health, and safety, and general welfare. Notwithstanding Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, any emergency regulations adopted by the department pursuant to this section shall be filed with, but not be repealed by, the Office of Administrative Law and shall remain in effect until revised by the department.

(c) The department shall send a notice to each person subject to the fee specified in subdivision (a). If a person fails to pay the fee within 60 days after receipt of this notice, the department shall require the person to pay an additional penalty fee. The department shall set the penalty fee at not more than 100 percent of the assessed fee, but in an amount sufficient to deter future noncompliance, as based upon that person's past history of compliance and ability to pay, and upon additional expenses incurred by this noncompliance.

(d) The department shall collect and deposit the fees and penalties collected pursuant to this section in the Hazardous Waste Injection Well Account, which is hereby created in the General Fund. The money within the Hazardous Waste Injection Well Account is available, upon appropriation by the Legislature, to the department for purposes of administering this article.

(e) This section applies only to injection wells into which hazardous waste is discharged. *(Amended by Stats. 2004, Ch. 193, Sec. 96. Effective January 1, 2005.)*

§ 25159.20. (a) The department shall specify, for purposes of paragraph (4) of Section 25200.6, the horizontal and vertical extent of any injection zone for an injection well. The department shall cite specific information presented in the report prepared pursuant to Section

25159.18 as the basis for specifying the extent of the injection zone and shall make a finding as to whether the injection wells' hydrogeological and operating conditions ensure that there is no potential for any migration of any hazardous waste constituents to any strata or waters of the state outside the injection zone.

(b) This section applies only to injection wells into which hazardous waste is discharged.
(Added by Stats. 1985, Ch. 1591, Sec. 1.)

§ 25159.21. (a) The state board, a regional board, or the department may enter and inspect a facility for determining compliance with this article, including, for this purpose, inspecting, at a reasonable time, records, files, papers, processes, and controls.

(b) Nothing in this article shall prevent the department from enforcing existing permit conditions for the land disposal of hazardous wastes that are more stringent than the restrictions of this article or prohibit the department, the state board, or the regional boards from imposing more stringent restrictions on the discharge of hazardous wastes at any particular hazardous waste disposal facility.
(Added by Stats. 1985, Ch. 1591, Sec. 1.)

§ 25159.22. This article shall not be construed to limit or abridge the powers and duties granted to the department pursuant to this chapter or pursuant to Chapter 6.8 (commencing with Section 25300) or to the state board or any regional board pursuant to Division 7 (commencing with Section 13000) of the Water Code, to the Division of Oil and Gas pursuant to Division 3 (commencing with Section 3000) of the Public Resources Code, or the authority of any city, county, or district to act pursuant to the local agency's ordinances or regulations.
(Added by Stats. 1985, Ch. 1591, Sec. 1.)

§ 25159.23. The State Oil and Gas Supervisor shall promptly report to the department and the state board any injection well regulated by the Division of Oil and Gas pursuant to Subpart F of Part 147 of Title 40 of the Code of Federal Regulations that is not in compliance with these regulations because fluids not authorized by these regulations are discharged into the well.
(Added by Stats. 1985, Ch. 1591, Sec. 1.)

§ 25159.24. (a) Any injection well used to inject contaminated groundwater that has been treated and is being reinjected into the same formation from which it was drawn for the purpose of improving the quality of the groundwater in the formation is exempt from this article if this method is part of a remedial program initiated in response to an order, requirement, or other action of a federal or state agency.

(b) Any injection well used for the reinjection of geothermal resources, as defined in Section 6903 of the Public Resources Code, is exempt from this article if the well is in compliance with Chapter 4 (commencing with Section 3700) of Division 3 of the Public Resources Code.
(Added by Stats. 1985, Ch. 1591, Sec. 1.)

§ 25159.25. Any action taken by the department pursuant to this article shall comply with and incorporate any waste discharge requirements issued by the state board or a regional board, and the action shall be consistent with all applicable water quality control plans adopted pursuant to Section 13170 of the Water Code and Article 3 (commencing with Section 13240) of Chapter 4 of Division 7 of the Water Code and with the state policies for water quality control adopted pursuant to Article 3 (commencing with Section 13140) of Chapter 3 of Division 7 of the Water Code, and any amendments made to these plans, policies, or requirements. The department may also include any more stringent requirement which the department determines is necessary or appropriate to protect water quality.
(Added by Stats. 1985, Ch. 1591, Sec. 1.)

DIVISION 101. Administration of Public Health

PART 3. Local Health Departments

CHAPTER 2. Powers and Duties of Local Health Officers and Local Health Departments

Article 1. County Health Officers

§ 101042. (a) If the local health officer or his or her designee is notified of a leak in an active gas pipeline, that is wihin the jurisdiction of the Division of Oil, Gas, and Geothermal Resources and within a sensitive area, pursuant to Section 3270.6 of the Public Resources Code and the local health officer or his or her designee determines that the leak poses a risk to public health or safety and that the response to the leak has been inadequate to protect the public health or safety, the local health officer or his or her designee shall, working collaboratively with the division and the owner or operator of the pipeline, do both of the following:

(1) Direct the responsible party to test, to the satisfaction of the agency overseeing the testing, the soil, air, and water in the affected area for contamination caused by the leak and disclose the results of the tests to the public.

(2) Make a determination, based on the result of the tests, on whether the leak poses a serious threat to the public health and safety of residents affected by the leak, and require the responsible party to provide assistance, including temporary relocation, to those residents if the local health officer or his or her designee so determines.

(b) If the local health officer or his or her designee determines, based on the results of the test, that the leak poses a serious threat to public health and safety, the local health officer or his or her designee shall direct the responsible party to notify all residents affected by the leak.

(c) The responsible party shall be liable for the costs incurred by the local health officer or his or her designee pursuant to this section.

(d) Providing resident assistance and reimbursement for local health officer expenses shall not relieve a responsible party from liability for damages, and a responsible party shall not condition assistance or request a waiver of liability from the recipient of the assistance.

(Added by Stats. 2015, Ch. 601, Sec. 2. Effective January 1, 2016.)

PUBLIC RESOURCES CODE

DIVISION 3. Oil and Gas

CHAPTER 1. Oil and Gas Conservation

Article 1. Definitions and General Provisions

§ 3000. Unless the context otherwise requires, the definitions hereinafter set forth shall govern the construction of this division.
(Amended by Stats. 1955, Ch. 1670.)

§ 3001. "Department," in reference to the government of this state, means the Department of Conservation.
(Amended by Stats. 1965, Ch. 1144.)

§ 3002. "Division," in reference to the government of this state, means the Division of Oil, Gas, and Geothermal Resources in the Department of Conservation; otherwise "division" means Division 3 (commencing with Section 3000) of the Public Resources Code.
(Amended by Stats. 1992, Ch. 999, Sec. 13. Effective January 1, 1993.)

§ 3003. "Director" means the Director of Conservation.
(Amended by Stats. 1965, Ch. 1144.)

§ 3004. "Supervisor" means the State Oil and Gas Supervisor.
(Enacted by Stats. 1939, Ch. 93.)

§ 3005. "Person" includes any individual, firm, association, corporation, or any other group or combination acting as a unit.
(Enacted by Stats. 1939, Ch. 93.)

§ 3006. "Oil" includes petroleum, and "petroleum" includes oil.
(Enacted by Stats. 1939, Ch. 93.)

§ 3007. "Gas" means any natural hydrocarbon gas coming from the earth.
(Amended by Stats. 1957, Ch. 405.)

§ 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 for a period of 24 consecutive months has not either produced oil or natural gas, produced water to be used in production stimulation, or been used for enhanced oil recovery, reservoir pressure management, or 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, or been used for enhanced oil recovery, reservoir pressure management, or injection. An idle well does not include an active observation well.

(e) “Long-term idle well” means any well that has been an idle well for eight or more years.
(Amended by Stats. 2017, Ch. 521, Sec. 51. (SB 809) Effective January 1, 2018.)

§ 3009. “Operator” means a person who, by virtue of ownership, or under the authority of a lease or any other agreement, has the right to drill, operate, maintain, or control a well or production facility.
(Amended by Stats. 2008, Ch. 562, Sec. 3. Effective January 1, 2009.)

§ 3010. “Production facility” means any equipment attendant to oil and gas production or injection operations including, but not limited to, tanks, flowlines, headers, gathering lines, wellheads, heater treaters, pumps, valves, compressors, injection equipment, and pipelines that are not under the jurisdiction of the State Fire Marshal pursuant to Section 51010 of the Government Code.
(Added by Stats. 2008, Ch. 562, Sec. 4. Effective January 1, 2009.)

§ 3012. The provisions of this division apply to any land or well situated within the boundaries of an incorporated city in which the drilling of oil wells is now or may hereafter be prohibited, until all wells therein have been abandoned as provided in this chapter.
(Amended by Stats. 1972, Ch. 898.)

§ 3013. This division shall be liberally construed to meet its purposes, and the director and the supervisor, acting with the approval of the director, shall have all powers, including the authority to adopt rules and regulations, which may be necessary to carry out the purposes of this division.
(Amended by Stats. 1992, Ch. 999, Sec. 14. Effective January 1, 1993.)

§ 3014. "District" means an oil and gas district as provided for in Section 3100.
(Added by renumbering Section 3015 by Stats. 1974, Ch. 765.)

§ 3015. For the purpose of implementing Section 503 of the Natural Gas Policy Act of 1978, the supervisor may make the determinations entrusted to state agencies having regulatory jurisdiction with respect to the production of natural gas. Such determinations shall be made pursuant to procedures prescribed in guidelines adopted by the supervisor.
(Added by Stats. 1979, Ch. 725.)

§ 3016. For purposes of this chapter, abandoned underground personal property, including a well, of an operator shall become the property of the mineral interest owner when the operator loses the right to remove the personal property under common law or under a lease or any other agreement that initially gave the operator the right to drill, operate, maintain, or control the well. In that case, in accordance with paragraph (3) of subdivision (c) of Section 3237, the mineral interest owner shall be held jointly liable for the well if, in the lease or other conveyance, the mineral interest owner retained a right to control the well operations that exceeds the scope of an interest customarily reserved in a lease or other conveyance in the event of default.
(Added by Stats. 2016, Ch. 272, Sec. 2. Effective January 1, 2017.)

Article 2. Administration

§ 3100. For the purposes of this chapter, the state is divided into districts, the number and boundaries of which shall be fixed by the director. The director and the supervisor shall have the authority to redefine the districts as needed to ensure the efficient administration of this chapter. The director and the supervisor shall solicit public input before revising the districts.
(Amended by Stats. 2017, Ch. 521, Sec. 52. (SB 809) Effective January 1, 2018.)

§ 3101. The supervisor shall appoint one chief deputy and at least one district deputy for each of the districts provided for in this chapter, and shall prescribe their duties.
(Amended by Stats. 1972, Ch. 898.)

§ 3103. The chief deputy shall be a competent engineer or geologist, preferably licensed in the state, and experienced in the development and production of oil and gas.
(Amended by Stats. 2017, Ch. 521, Sec. 53. (SB 809) Effective January 1, 2018.)

§ 3104. Each district deputy shall be a competent engineer or geologist, preferably licensed in the state, and experienced in the development and production of oil and gas.
(Amended by Stats. 2017, Ch. 521, Sec. 54. (SB 809) Effective January 1, 2018.)

§ 3105. An office under the supervision of a district deputy may be maintained in each district. The office shall be conveniently accessible to the oil and gas operators in the district.
(Amended by Stats. 1988, Ch. 1077, Sec. 1.)

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

(b) The supervisor shall also supervise the drilling, operation, maintenance, and abandonment of wells so as to permit the owners or operators of the wells to utilize all methods and practices known to the oil industry for the purpose of increasing the ultimate recovery of underground hydrocarbons and which, in the opinion of the supervisor, are suitable for this purpose in each proposed case. To further the elimination of waste by increasing the recovery of underground hydrocarbons, it is hereby declared as a policy of this state that the grant in an oil and gas lease or contract to a lessee or operator of the right or power, in substance, to explore for and remove all hydrocarbons from any lands in the state, in the absence of an express provision to the contrary contained in the lease or contract, is deemed to allow the lessee or contractor, or the lessee's or contractor's successors or assigns, to do what a prudent operator using reasonable diligence would do, having in mind the best interests of the lessor, lessee, and the state in producing and removing hydrocarbons, including, but not limited to, the injection of air, gas, water, or other fluids into the productive strata, the application of pressure heat or other means for the reduction of viscosity of the hydrocarbons, the supplying of additional motive force, or the creating of enlarged or new channels for the underground movement of hydrocarbons into production wells, when these methods or processes employed have been approved by the supervisor, except that nothing contained in this section imposes a legal duty upon the lessee or contractor, or the lessee's or contractor's successors or assigns, to conduct these operations.

(c) The supervisor may require an operator to implement a monitoring program, designed to detect releases to the soil and water, including both groundwater and surface water, for aboveground oil production tanks and facilities.

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

(Amended by Stats. 1994, Ch. 523, Sec. 3. Effective January 1, 1995.)

§ 3106.5. Acting with the approval of the director, the supervisor may annually expend, from the amount appropriated to the division, up to ten thousand dollars ($10,000) to support activities at the West Kern Oil Museum.
(Added by Stats. 1994, Ch. 731, Sec. 2. Effective January 1, 1995.)

§ 3107. A district deputy in each district, designated by the supervisor, shall collect all necessary information regarding the oil and gas wells in the district, with a view to determining the presence of oil and gas sands and the location and extent of strata bearing water suitable for irrigation or domestic purposes that might be affected. The district deputy shall prepare maps and other accessories necessary to determine the presence of oil and gas sands and the location and extent of strata bearing water suitable for irrigation or domestic purposes or surface water suitable for those purposes. This work shall be done with the view to advising the operators as to the best means of protecting the oil and gas sands and the water-bearing strata and surface water, and with a view to aiding the supervisor in ordering tests or repair work at wells. All this data shall be kept on file in the office of the district deputy of the respective district.
(Amended by Stats. 1984, Ch. 278, Sec. 2.)

§ 3108. On or before the first day of October of each year the supervisor shall make public, for the benefit of all interested persons, a report in writing showing:

(a) The total amounts of oil and gas produced in each county in the state during the previous calendar year.

(b) The total cost of the division for the previous fiscal year.

(c) The total amount delinquent and uncollected from any assessments or charges levied pursuant to this chapter.

The report shall also include such other information as the supervisor deems advisable.
(Amended by Stats. 1975, Ch. 1049.)

§ 3109. The supervisor may publish any publications, reports, maps, or other printed matter relating to oil and gas, for which there may be public demand. If these publications, reports, maps, or other printed matter are sold, they shall be sold at cost, and the proceeds shall be deposited to the credit of the Oil, Gas, and Geothermal Administrative Fund.
(Amended by Stats. 2003, Ch. 240, Sec. 10. Effective August 13, 2003.)

§ 3110. All money paid to the Treasurer pursuant to Article 7 (commencing with Section 3400) shall be deposited to the credit of the Oil, Gas, and Geothermal Administrative Fund, which is hereby established in the State Treasury, for expenditure as provided in Section 3401.
(Amended by Stats. 2003, Ch. 240, Sec. 11. Effective August 13, 2003.)

§ 3111. (a) All money received in repayment of repair work done as provided in this chapter shall be returned and credited to the Oil, Gas, and Geothermal Administrative Fund for expenditure as provided in Section 3401.

(b) All miscellaneous revenues from oil and gas wells and from real and personal property acquired by the supervisor in the course of carrying out this chapter shall be credited to the Oil, Gas, and Geothermal Administrative Fund for expenditure as provided in Section 3401.
(Amended by Stats. 2003, Ch. 240, Sec. 12. Effective August 13, 2003.)

§ 3112. Notwithstanding any other provision of this code or of law and except as provided in the State Building Standards Law, Part 2.5 (commencing with Section 18901) of Division 13 of the Health and Safety Code, on and after January 1, 1980, the supervisor or the Division of Oil and Gas shall not adopt nor publish a building standard as defined in Section 18909 of the Health and Safety Code unless the provisions of Sections 18930, 18933, 18938, 18940, 18943, 18944, and 18945 of the Health and Safety Code are expressly excepted in the statute under which the authority to adopt rules, regulations, or orders is delegated. Any building standard adopted in violation of this section shall have no force or effect. Any building standard adopted before January 1, 1980, pursuant to this code and not expressly excepted by statute from such provisions of the State Building Standards Law shall remain in effect only until January 1, 1985, or until adopted, amended, or superseded by provisions published in the State Building Standards Code, whichever occurs sooner.
(Added by Stats. 1979, Ch. 1152.)

§ 3113. (a) Notwithstanding Section 10231.5 of the Government Code, the division shall, in compliance with Section 9795 of the Government Code, annually prepare and transmit to the Legislature a report of all of the following information statewide and by district:

(1) The number of shall-witness and may-witness operations performed.

(2) The number of shall-witness and may-witness operations performed that were witnessed by the Division.

(3) The number of shall-witness and may-witness operations performed on critical wells.

(4) The number of shall-witness and may-witness operations performed on critical wells that were witnessed by the division.

(b) For purposes of this section, the following terms have the following meanings:

(1) “Critical well” has the same meaning as in Section 1720 of Title 14 of the California Code of Regulations, or a successor regulation.

(2) “May-witness” means an operation performed that by law the division is authorized to witness.

(3) “Shall-witness” means an operation performed that by law the division is required to witness.
(Added by Stats. 2018, Ch. 51, Sec. 18. (SB 854) Effective June 27, 2018.)

§ 3114. (a) By July 30, 2019, and annually thereafter, the Department of Conservation, in consultation with the State Water Resources Control Board, shall report to the fiscal and relevant policy committees of the Legislature on the Underground Injection Control Program. The report shall include, but is not limited to, all of the following about activities in the previous 12 months:

(1) The number and location of underground injection control project approvals issued by the department, including projects that were approved but subsequently lapsed without having commenced injection.

(2) The monthly average number of pending project applications.

(3) The average length of time to obtain an underground injection control project approval from date of receipt of complete application to the date of issuance.

(4) The average amount of time to review an underground injection control project proposal by the Division of Oil, Gas, and Geothermal Resources and the average combined review time by the State Water Resources Control Board and regional water quality control boards for each proposed underground injection control project.

(5) The number of project proposals pending for over one year.

(6) A list of pending aquifer exemptions, if any, and their status in the review process.

(7) The average length of time to process an aquifer exemption and the average amount of time to review a proposed aquifer exemption by the Division of Oil, Gas, and Geothermal Resources and the average combined review time by the State Water Resources Control Board and regional water quality control boards for each aquifer exemption proposal.

(8) The number and description of underground injection control related violations identified.

(9) The number of enforcement actions taken by the department.

(10) The number of shut-in orders or requests to relinquish permits and the status of those orders or requests.

(11) The number, classification, and location of staff with work related to underground injection control.

(12) The number of staff vacancies for positions associated with underground injection control.

(13) Any state or federal legislation, administrative, or rulemaking changes to the program.

(14) The number of underground injection control projects reviewed for compliance with statutes and regulations in each district and a summary of findings from project reviews completed during the reporting period, including any steps taken to address identified deficiencies.

(15) The number of underground injection control projects that have not been reviewed for compliance with applicable statutes and regulations within the prior two years.

(16) Summary of significant milestones in their compliance schedule agreed to with the United States Environmental Protection Agency, as indicated in the March 9, 2015, letter to the division and the state board from the United States Environmental Protection Agency, including,

but not limited to, regulatory updates, evaluations of injection wells, and aquifer exemption applications.

(17) Summary of activities undertaken by the underground injection control review panel established pursuant to Section 46 of Chapter 24 of the Statutes of 2015.

(b) This section shall become inoperative on October 1, 2024, and as of January 1, 2025, is repealed.

(Added by Stats. 2018, Ch. 742, Sec. 2. (SB 1493) Effective January 1, 2019. Section inoperative October 1, 2024. Repealed as of January 1, 2025, by its own provisions.)

Article 2.5. Underground Injection Control

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

(a) "Beneficial use" has the same meaning asset forth in subdivision (f) of Section 13050 of the Water Code.

(b) "Class II well" has the same meaning as set forth in Section 144.6 of Title 40 of the Code of Federal Regulations.

(c) "Exempted aquifer" has the same meaning as set forth in Section 144.3 of Title 40 of the Code of Federal Regulations.

(d) "State board" means the State Water Resources Control Board.

(e) "Underground Injection Control Program" means a program covering Class II wells for which the division has received primacy from the United States Environmental Protection Agency pursuant to Section 1425 of the federal Safe Drinking Water Act (42 U.S.C. Sec. 300h-4).

(Added by Stats. 2015, Ch. 24, Sec. 29. Effective June 24, 2015.)

§ 3131. (a) To ensure the appropriateness of a proposal by the state for an exempted aquifer determination subject to any conditions on the subsequent injection of fluids, and prior to proposing to the United States Environmental Protection Agency that it exempt an aquifer or portion of an aquifer pursuant to Section 144.7 of Title 40 of the Code of Federal Regulations, the division shall consult with the appropriate regional water quality control board and the state board concerning the conformity of the proposal with all of the following:

(1) Criteria set forth in Section 146.4 of Title 40 of the Code of Federal Regulations.

(2) The injection of fluids will not affect the quality of water that is, or may reasonably be, used for any beneficial use.

(3) The injected fluid will remain in the aquifer or portion of the aquifer that would be exempted.

(b) Based on the consultation pursuant to subdivision (a), if the division and the state board concur that an aquifer or portion of an aquifer may merit consideration for exemption by the United States Environmental Protection Agency, they shall provide a public comment period and, with a minimum of 30 days public notice, jointly conduct a public hearing.

(c) Following review of the public comments, and only if the division and state board concur that the exemption proposal merits consideration for exemption, the division shall submit the aquifer exemption proposal to the United States Environmental Protection Agency.
(Added by Stats. 2015, Ch. 24, Sec. 29. Effective June 24, 2015.)

§ 3132. (a) Before submitting the proposal for an exempted aquifer determination to the United States Environmental Protection Agency, the division shall notify the relevant policy committees of the Legislature of the exemption proposal.

(b) This section shall become inoperative on March 1, 2019, and, as of January 1, 2020, is repealed, unless a later enacted statute, that becomes operative on or before January 1, 2020, deletes or extends the dates on which it becomes inoperative and is repealed.
(Added by Stats. 2015, Ch. 24, Sec. 29. Effective June 24, 2015. Inoperative March 1, 2019. Repealed as of January 1, 2020, by its own provisions.)

Article 3. Well Stimulation

§ 3150. "Additive" means a substance or combination of substances added to a base fluid for purposes of preparing well stimlation 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.
(Added by Stats. 2013, Ch. 313, Sec. 2. Effective January 1, 2014.)

§ 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.
(Added by Stats. 2013, Ch. 313, Sec. 2. Effective January 1, 2014.)

§ 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.
(Added by Stats. 2013, Ch. 313, Sec. 2. Effective January 1, 2014.)

§ 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.

(Added by Stats. 2013, Ch. 313, Sec. 2. Effective January 1, 2014.)

§ 3154. "Proppants" means materials inserted or injected into the underground geologic formation that are intended to prevent fractures from closing.
(Added by Stats. 2013, Ch. 313, Sec. 2. Effective January 1, 2014.)

§ 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.
(Added by Stats. 2013, Ch. 313, Sec. 2. Effective January 1, 2014.)

§ 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.
(Added by Stats. 2013, Ch. 313, Sec. 2. Effective January 1, 2014.)

§ 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.
(Added by Stats. 2013, Ch. 313, Sec. 2. Effective January 1, 2014.)

§ 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.
(Added by Stats. 2013, Ch. 313, Sec. 2. Effective January 1, 2014.)

§ 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.
(Added by Stats. 2013, Ch. 313, Sec. 2. Effective January 1, 2014.)

§ 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:

(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, and flowback fluids and the 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, 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 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 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) The time period available for approval 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.

(D) In the absence of state implementation of a regional groundwater monitoring program pursuant to paragraph (1) of subdivision (h) of Section 10783 of the Water Code, the supervisor or district deputy may approve a permit application for well stimulation treatment pursuant to subparagraph (A) prior to the approval by the State Water Resources Control Board or a regional water quality control board of an area-specific groundwater monitoring program developed by an owner or operator pursuant to paragraph (2) of subdivision (h) of Section 10783 of the Water Code, but the well stimulation treatment shall not commence until the state board or the regional board approves the area-specific groundwater monitoring program.

(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.

(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 committees 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) 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 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.

(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:

(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 a 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 and 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.

(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.

(Amended by Stats. 2017, Ch. 521, Sec. 55. Effective January 1, 2018.)

§ 3161. (a) The division shall finalize the regulations governing this article on or before January 1, 2015. Notwithstanding any other laws, the regulations shall become effective on July 1, 2015.

(b) The division shall allow, until regulations specified in subdivision (b) of Section 3160 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 paragraph (2) of subdivision (b) of, paragraphs (1), (6), and (7) of subdivision (d) of, and paragraph (1) of subdivision (g) of, Section 3160.

(2) The owner or operator shall provide a complete well history, incorporating the information required by Section 3160, to the division on or before March 1, 2015.

(3) (A) The division commences the preparation of an environmental impact report (EIR) pursuant to the California Environmental Quality Act (Division 13 (commencing with Section 21000)), to provide the public with detailed information regarding any potential environmental impacts of well stimulation in the state.

(B) Any environmental review conducted by the division shall fully comply with both of the following requirements:

(i) The EIR shall be certified by the division as the lead agency, no later than July 1, 2015.

(ii) 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, January 1, 2014.

(C) This paragraph does not prohibit a local lead agency from conducting its own EIR.

(4) 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.

(c) The division has the emergency regulatory authority to implement the purposes of this section. Notwithstanding Section 11349.6 of the Government Code or other laws, an emergency regulation adopted pursuant to this subdivision implementing subdivision (b) shall be filed with, but shall not be disapproved by, the Office of Administrative Law, and shall remain in effect until revised by the director or July 1, 2015, whichever is earlier.

(d) This section does not limit the authority of the division to take appropriate action pursuant to subdivision (a) of Section 3106.

(Amended by Stats. 2014, Ch. 35, Sec. 131. Effective June 20, 2014.)

Article 3.5. Natural Gas Storage Wells

§ 3180. (a) As used in this article, “gas storage well” means an active or idle well used primarily to inject natural gas ino or withdraw natural gas from an underground natural gas storage facility.

(b) On or before January 1, 2018, the operators of all gas storage wells shall have commenced a mechanical integrity testing regime specified by the division. The testing regime shall include all of the following:

(1) Regular leak testing.

(2) Casing wall thickness inspection.

(3) Pressure test of the production casing.

(4) Any additional testing deemed necessary by the division to demonstrate the integrity of the well.

(c) All anomalies identified in the testing shall be immediately reported to the appropriate district office and explained to the supervisor's satisfaction.

(d) (1) The division shall promulgate regulations that establish standards for the design, construction, and maintenance of all gas storage wells to ensure that integrity concerns with a gas storage well are identified and addressed before they can become a threat to life, health, property, the climate, or natural resources.

(2) The regulations shall require that gas storage wells be designed, constructed, and maintained to ensure that a single point of failure does not pose an immediate threat of loss of control of fluids, as determined by the supervisor.

(3) In developing the regulations, the division shall consider enhanced design, construction, and maintenance measures that could meet the standard in paragraph (2), including any of the following:

(A) Primary and secondary mechanical well barriers to isolate the storage gas within the storage reservoir and transfer storage gas from the surface into and out of the storage reservoir.

(B) Production casing to the surface with the required integrity to contain reservoir pressure.

(C) Tubing and packer and production tree with the required integrity to contain reservoir pressure.

(D) Surface controlled subsurface safety valves or Christmas tree valves with the required integrity to contain reservoir pressure that halt flow through the well.

(E) Secondary barrier with overlapping cement casing between two concentric casings with good quality cement bond.

(F) Wellhead with annular valves and seals and the required integrity to contain reservoir pressure.

(G) Casing with a hanger and seal assembly.

(H) Any other well construction requirements the supervisor determines would improve the protection of public health, safety, the environment, and natural resources.

(4) In developing the regulations, the division shall develop a schedule for ongoing mechanical integrity testing.

(e) In order to facilitate consistency, standardization, and training for site inspection and maintenance, to the extent that the regulations promulgated by the division pursuant to subdivision (d) address surface equipment associated with an underground gas storage facility, the division shall ensure that those regulations are consistent with comparable requirements in Parts 190 to 199, inclusive, of Title 49 of the Code of Federal Regulations.

(Added by Stats. 2016, Ch. 673, Sec. 3. Effective January 1, 2017.)

§ 3181. (a) The operator of a gas storage well shall submit for the supervisor's approval the following materials:

(1) Data describing the gas storage project and gas storage wells that demonstrate that stored gas will be confined to the approved zone or zones. Updated data shall be provided to the division if conditions change or if more accurate data become available.

(2) A risk management plan to identify and plan for mitigation of all threats and hazards and potential threats and hazards associated with gas storage well operation in order to ensure internal and external mechanical integrity of a well, including site-specific information. The risk management plan shall provide for regular review and revision, as needed, to ensure the plan appropriately reflects current conditions. The risk management plan shall include, but is not limited to, all of the following:

(A) A natural gas leak prevention and response program that addresses the full range of natural gas leaks possible at the facility with specific response plans that provide for immediate control of the leak. The operator shall consult with local emergency response entities on the response plans. The prevention and response program shall include, but is not limited to, all of the following:

(i) A protocol for public notice of a large, uncontrollable leak to any potentially impacted community, as defined in the risk management plan, if the leak cannot be controlled within 48 hours of discovery by the operator.

(ii) Prepositioning, as feasible, and identification of materials and personnel necessary to respond to leaks. This shall include materials and equipment to respond to and stop the leak itself as well as to protect public health.

(iii) The identification of personnel responsible for notifying regulatory authorities with jurisdiction over the range of leaks possible.

(B) A plan for corrosion monitoring and evaluation.

(C) A schedule for regular well and reservoir integrity assessments.

(D) An assessment of the risks associated with the gas storage well and its operation.

(E) Planned risk mitigation efforts.

(F) A regular maintenance program for the well and the portion of the facility within the division's jurisdiction. The maintenance program shall include training for site personnel and proactive replacement of equipment at risk of failure to ensure safe operation.

(3) In addition to other factors deemed relevant by the supervisor, the risk management plan required in paragraph (2) shall consider all of the following:

(A) The facility's distance from dwellings, other buildings intended for human occupancy, or other well-defined outside areas where people may assemble such as campgrounds, recreational areas, or playgrounds.

(B) The risks to and from the well related to roadways, rights of way, railways, airports, and industrial facilities.

(C) Proximity to environmentally or culturally sensitive areas.

(D) The risks of well sabotage.

(E) The current and predicted development of the surrounding area.

(F) Topography and local wind patterns.

(b) All of the materials described in subdivision (a) shall be reported to the division according to a schedule approved by the supervisor. The operator shall not deviate from the programs, plans, and other conditions and protocols contained in the materials without prior written approval by the supervisor.

(Added by Stats. 2016, Ch. 673, Sec. 3. Effective January 1, 2017.)

§ 3182. On a weekly basis, the division shall post a list of notices received pursuant to Section 3203 on the division's Internet Web site. Copies of any notice shall be provided to members of the public upon request.
(Added by Stats. 2016, Ch. 673, Sec. 3. Effective January 1, 2017.)

§ 3183. (a) The division, in consultation with the State Air Resources Board, shall determine and adopt by regulation what constitutes a reportable leak from a gas storage well and the timeframe for reporting that leak. The regulations shall require an operator to immediately report to the division a leak that poses a significant present or potential hazard to public health and safety, property, or to the environment.

(b) Until the regulations pursuant to subdivision (a) are in effect, a leak of any size from a gas storage well shall be deemed a reportable leak, and the operator shall notify the division immediately.

(c) If a leak from a gas storage well that is reported to the division pursuant to subdivision (a) or (b), as applicable, cannot be controlled within 48 hours, the division shall post information about the leak on its Internet Web site and provide regular updates to the public until the leak is stopped.
(Added by Stats. 2016, Ch. 673, Sec. 3. Effective January 1, 2017.)

§ 3184. (a) Within 72 hours of being notified of a reportable leak, pursuant to Section 3183, the supervisor shall determine if the reportable leak poses a significant present or potential hazard to public health and safety, property, or to the environment such that a relief well is necessary. If the supervisor makes that determination, the operator shall immediately begin preparation for, and, as soon as practicable at the determination of the supervisor, commence the drilling of, a relief well.

(b) Nothing in subdivision (a) shall prevent the supervisor from making a determination after the initial 72-hour period that a reportable leak poses a significant hazard to public health and safety, property, or to the environment and that a relief well is necessary. If the supervisor makes that determination, the operator shall immediately begin preparation for, and, as soon as practicable at the determination of the supervisor, commence the drilling of, a relief well.

(c) If the operator is required to drill a relief well under subdivision (a) or (b), the operator's efforts to drill the relief well shall continue until the reportable leak has been stopped and the cause of the reportable leak has been fully addressed or the supervisor determines that other means of controlling the reportable leak are appropriate.
(Added by Stats. 2016, Ch. 673, Sec. 3. Effective January 1, 2017.)

§ 3185. The division shall perform unannounced random onsite inspections of some gas storage wells annually. The results shall be posted and available to the public on the division's Internet Web site.
(Added by Stats. 2016, Ch. 673, Sec. 3. Effective January 1, 2017.)

§ 3186. An operator of a gas storage well shall develop and maintain a comprehensive gas storage well training and mentoring program for those employees whose job duties involve the safety of operations and maintenance of gas storage wells and associated equipment. The training program shall include, but is not limited to, gas storage well operations, including best practices to prevent leaks, maintenance and testing, gas storage well safety regulations, emergency response, and incident reporting. If storage field employees are represented by a labor union, the operator shall consult with the relevant union local on safety issues and, when requested, establish a framework to provide training through a joint labor-management training program.
(Added by Stats. 2016, Ch. 673, Sec. 3. Effective January 1, 2017.)

§ 3187. All materials provided to the division and approved by the supervisor to comply with Sections 3181, 3184, and 3185 shall be posted and available to the public on the Internet Web site of the division in a timely manner.
(Added by Stats. 2016, Ch. 673, Sec. 3. Effective January 1, 2017.)

Article 4. Regulation of Operations

§ 3200. An owner or operator of a well or production facility shall designate an agent, giving his or her address, who resies in this state, to receive and accept service of all orders, notices, and processes of the supervisor or a court of law. Every person so appointing an agent shall, within five days after the termination of the agency, notify the supervisor, in writing, of the termination, and unless operations are discontinued, shall appoint a new agent.
(Amended by Stats. 2008, Ch. 562, Sec. 5. Effective January 1, 2009.)

§ 3201. The operator of a well or production facility shall notify the supervisor or the district deputy, in writing, in such form as the supervisor or the district deputy may direct, of the sale, assignment, transfer, conveyance, exchange, or other disposition of the well or production facility by the operator of the well or production facility as soon as is reasonably possible, but in no event later than the date that the sale, assignment, transfer, conveyance, exchange, or other disposition becomes final. The operator shall not be relieved of responsibility for the well or production facility until the supervisor or the district deputy acknowledges the sale, assignment, transfer, conveyance, exchange, or other disposition, in writing, and the person acquiring the well or production facility is in compliance with Section 3202. The operator's notice shall contain all of the following:

(a) The name and address of the person to whom the well or production facility was or will be sold, assigned, transferred, conveyed, exchanged, or otherwise disposed.

(b) The name and location of the well or production facility, and a description of the land upon which the well or production facility is situated.

(c) The date that the sale, assignment, transfer, conveyance, exchange, or other disposition becomes final.

(d) The date when possession was or will be relinquished by the operator as a result of that disposition.
(Amended by Stats. 2008, Ch. 562, Sec. 6. Effective January 1, 2009.)

§ 3202. (a) A person who acquires the right to operate a well or production facility, whether by purchase, transfer, assignment, conveyance, exchange, or other disposition, shall, as soon as it is reasonably possible, but not later than the date when the acquisition of the well or production facility becomes final, notify the supervisor or the district deputy, in writing, of the person's operation. The acquisition of a well or production facility shall not be recognized as complete by the supervisor or the district deputy until the new operator provides all of the following material:

(1) The name and address of the person from whom the well or production facility was acquired.

(2) The name and location of the well or production facility, and a description of the land upon which the well or production facility is situated.

(3) The date when the acquisition becomes final.

(4) The date when possession was or will be acquired.

(5) An indemnity bond for each well as required under Section 3204 or 3205.

(b) This section shall become operative on January 1, 2018.
(Repealed (in Sec. 3) and added by Stats. 2016, Ch. 272, Sec. 4. Effective January 1, 2017. Section operative January 1, 2018, by its own provisions.)

§ 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 24 months of receipt of the notice, the notice shall be deemed canceled, the notice shall not be extended, and the cancellation shall be noted in the division's records. 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). *(Amended by Stats. 2017, Ch. 652, Sec. 1. (SB 724) Effective January 1, 2018.)*

§ 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.

(Repealed (in Sec. 5) and added by Stats. 2016, Ch. 272, Sec. 4. Effective January 1, 2017. Section operative January 1, 2018, by its own provisions.)

§ 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.

(Repealed (in Sec. 7) and added by Stats. 2016, Ch. 272, Sec. 4. (AB 2729) Effective January 1, 2017. Section operative January 1, 2018, by its own provisions.)

§ 3205.1. (a) Notwithstanding Sections 3204 and 3205, a person who engages in the drilling, redrilling, or 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, after providing the operator with an opportunity to submit a cost estimate for consideration by the supervisor. 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.

(Amended by Stats. 2018, Ch. 607, Sec. 2. (SB 1147) Effective January 1, 2019.)

§ 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.
(Amended by Stats. 2013, Ch. 315, Sec. 4. Effective January 1, 2014.)

§ 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.
(Amended by Stats. 1998, Ch. 1068, Sec. 5. Effective January 1, 1999.)

§ 3205.6 Before July 1, 2020, the supervisor shall do all of the following:

(a) Evaluate and estimate the costs associated with the decommissioning, including plugging and abandonment pursuant to Section 3208, of the offshore oil and gas wells under its jurisdiction.

(b) If necessary, based on the estimates made pursuant to subdivision (a), develop a schedule to increase the bond amounts or other financial surety provided by an operator of an offshore oil or gas well to ensure sufficient moneys are available to the state to decommission the well if no other entity is responsible for those decommissioning costs.

(c) Coordinate with the State Lands Commission to ensure the actions taken pursuant to this section and Section 6829.3 are not duplicative and are consistent with Section 3205.1.
(Added by Stats. 2018, Ch. 607, Sec. 3. (SB 1147) Effective January 1, 2019.)

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

(1) No later than May 1 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). If the operator has eliminated more wells than required in the prior two years, the supervisor may deduct from the new requirement the net total of long-term idle wells eliminated in excess of those previously required. In addition, 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 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.

(Amended by Stats. 2018, Ch. 742, Sec. 3. (SB 1493) Effective January 1, 2019.)

§ 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).

(Added by Stats. 2016, Ch. 272, Sec. 11. Effective January 1, 2017.)

§ 3206.3. (a) (1) Notwithstanding Section 10231.5 of the Government Code, on or before July 1, 2019, and annually thereafter until July 1, 2026, the supervisor shall, in compliance with Section 9795 of the Government Code, prepare and transmit to the Legislature a comprehensive report on the status of idle and long-term idle wells for the preceding calendar year. The report shall include:

(A) A list of all idle and long-term idle wells in the state by American Petroleum Institute identification number and indicating the operator, field, and pool.

(B) A list of all wells whose idle or long-term idle status changed in the preceding year by American Petroleum Institute identification number with the disposition and current status of each well.

(C) A list of orphan wells remaining, the estimated costs of abandoning those orphan wells, and a timeline for future orphan well abandonment with a specific schedule of goals. Idle and long-term idle wells that have become orphan wells shall be identified in the list. For the purposes of this report, an orphan well is a well that has no party responsible for it, leaving the state to plug and abandon it.

(D) A list of all operators with plans filed with the supervisor for the management and elimination of all long-term idle wells and the status of those plans.

(E) Any additional relevant information as determined by the supervisor.

(2) The report shall be made publicly available and an electronic version shall be available on the division’s Internet Web site.

(b) Information on how to access the plans described in subparagraph (D) of paragraph (1) of subdivision (a) shall be on the division’s Internet Web site.

(c) After July 1, 2026, the division shall continue to regularly provide updated information describing idle and long-term idle wells on the division’s Internet Web site.

(Added by Stats. 2016, Ch. 272, Sec. 12. Effective January 1, 2017.)

§ 3206.5. (a) Any city or county may request from the supervisor a list of all idle wells, as defined in subdivision (d) of Section 3008, within its jurisdiction.

(b) After receiving the list from the supervisor, the city or county may identify idle wells identified pursuant to subdivision (a) 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.

(Amended by Stats. 2017, Ch. 652, Sec. 3. (SB 724) Effective January 1, 2018.)

§ 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.

(Repealed (in Sec. 13) and added by Stats. 2016, Ch. 272, Sec. 4. Effective January 1, 2017. Section operative January 1, 2018, by its own provisions.)

§ 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.

(Repealed (in Sec. 15) and added by Stats. 2016, Ch. 272, Sec. 4. Effective January 1, 2017. Section operative January 1, 2018, by its own provisions.)

§ 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.

(Amended by Stats. 2016, Ch. 272, Sec. 17. Effective January 1, 2017.)

§ 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.

(Amended by Stats. 1976, Ch. 794.)

§ 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.
(Enacted by Stats. 1939, Ch. 93.)

§ 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.
(Amended by Stats. 1984, Ch. 278, Sec. 6.)

§ 3212. The core record shall show the depth, character, and fluid content of cores obtained, so far as determined.
(Enacted by Stats. 1939, Ch. 93.)

§ 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.
(Amended by Stats. 2013, Ch. 313, Sec. 3. Effective January 1, 2014.)

§ 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.
(Amended by Stats. 1976, Ch. 1073.)

§ 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 July 30 of each year, 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.

(Amended by Stats. 2017, Ch. 521, Sec. 56. (SB 809) Effective January 1, 2018.)

§ 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.
(Amended by Stats. 1976, Ch. 1073.)

§ 3217. (a) (1) The supervisor shall continue the prohibition against Southern California Gas Company injecting any natural gas into the Aliso Canyon natural gas storage facility located in the County of Los Angeles until a comprehensive review of the safety of the gas storage wells at the facility is completed and the supervisor determines that well integrity has been ensured by the review, the risks of failures identified in the review have been addressed, and the supervisor's duty to prevent damage to life, health, property, and natural resources, and other requirements, as specified in Section 3106, is satisfied. The supervisor may not lift the prohibition on injection until the Executive Director of the Public Utilities Commission has concurred via letter with the supervisor regarding his or her determination of safety.

(2) For purposes of this section, "facility" means the Aliso Canyon natural gas storage facility located in the County of Los Angeles operated by Southern California Gas Company.

(b) (1) The criteria for the gas storage well comprehensive safety review shall be determined by the supervisor with input from contracted independent experts and shall include the steps in subdivision (c).

(2) The supervisor shall direct the contracted independent experts to provide a methodology to be used in assessing the tests and inspections specified in the criteria. This requirement may be satisfied by the independent experts reviewing and, if necessary, revising the division's written methodology for assessing the tests and inspections specified in the criteria. The methodology shall include all tests and inspections required by the criteria. The division shall post the methodology online on a public portion of its Internet Web site.

(c) The gas storage well comprehensive safety review shall include the following steps to ensure external and internal well mechanical integrity:

(1) All gas storage wells shall be tested and inspected from the surface to the packer or to any wellbore restriction near the top of the geologic formation being used for gas storage, whichever is higher in elevation, to detect existing leaks using temperature and noise logs.

(2) Any leaks shall be stopped and remediated to the satisfaction of the supervisor.

(3) Following remediation, leak detection tests shall be repeated and results reviewed by the supervisor.

(4) (A) Unless a well has been fully plugged and abandoned to the supervisor's satisfaction and in accordance with Section 3208, the well shall be evaluated and remediated in accordance with subparagraph (B) or plugged in accordance with subparagraph (C).

(B) If a gas storage well is intended to return to service for the purposes of resuming injections to the facility, it shall be tested and inspected from the surface to the packer or to any wellbore restriction near the top of the geologic formation being used for gas storage, whichever is higher in elevation, to ensure mechanical integrity. As identified in the division's criteria, these tests and inspections shall include the measurement of casing thickness and integrity, an evaluation of the cement bond on the casing, the determination as to whether any deformities in

the well casing exist, and an evaluation of the well's ability to withstand pressures that exceed maximum allowable injection and production pressures, with a reasonable margin for safety, at the facility in accordance with the criteria determined by the supervisor with input from independent experts pursuant to subdivision (b). If the tests reveal that a well poses a risk of failure, the supervisor shall require remediation and repeat tests as necessary to demonstrate to the satisfaction of the supervisor that remediation has mitigated any potential identified risks. If the operator cannot remediate the well to mitigate the identified risks to the satisfaction of the supervisor, the well shall be plugged and abandoned in accordance with Section 3208.

(C) (i) If a well is to be taken out of service before resumption of gas injections at the facility, it shall be removed from operation and isolated from the gas storage reservoir through plugging according to the division's criteria, including, but not limited to, the demonstration of sufficient cement to prevent migrations between the reservoir and other zones, placement of a mechanical plug at the bottom of the well, and subsequent filling of the well with fluid, and to specifications approved by the supervisor. All gas storage wells that are taken out of service under this subparagraph shall be subjected to ongoing testing and monitoring requirements identified in the criteria determined by the supervisor with input from independent experts. The monitoring shall include, but not be limited to, real-time and daily pressure monitoring, as applicable. A gas storage well shall not be returned to service unless the testing and remediation required under subparagraph (B) has been completed.

(ii) A gas storage well, within one year of being plugged and isolated from the gas storage reservoir pursuant to clause (i), shall either be returned to service by satisfactorily completing the testing and remediation required under subparagraph (B) or be permanently plugged and abandoned to the supervisor's satisfaction in accordance with Section 3208.

(D) The supervisor shall make a written finding for each gas storage well that has satisfactorily completed the testing and remediation required under subparagraph (B).

(5) The gas storage well comprehensive safety review is not complete until every gas storage well at the facility has completed the testing and remediation required under subparagraph (B) of paragraph (4), been temporarily abandoned and isolated from the reservoir as required under clause (i) of subparagraph (C) of paragraph (4), or been fully plugged and abandoned to the supervisor's satisfaction in accordance with Section 3208.

(d) Upon completion of the gas storage well comprehensive safety review but before authorizing the commencement of injections at the facility, the division shall hold at least one duly noticed public meeting in the affected community to provide the public an opportunity to comment on the safety review findings and on the proposed pressure limit as provided in subdivision (e).

(e) (1) Before commencing injections at the facility, the operator of the facility shall provide the division with the proposed maximum reservoir pressure and include data and calculations supporting the basis for the pressure limit. The pressure limit shall account for the pressure required to inject intended gas volumes at all proposed inventory levels and the pressure limit shall not exceed the design pressure limits of the reservoir, wells, wellheads, piping, or associated facilities with an appropriate margin for safety.

(2) The operator's proposed maximum reservoir pressure shall be subject to review and approval by the supervisor, and the supervisor shall consult with independent experts regarding the appropriate maximum and minimum reservoir pressure at the facility.

(f) Once the gas storage well comprehensive safety review is complete pursuant to paragraph (5) of subdivision (c), the supervisor has approved the maximum and minimum reservoir pressure pursuant to paragraph (2) of subdivision (e), and the public hearing is held pursuant to subdivision (d), the supervisor may allow injections of natural gas at the facility.

(g) All gas storage wells returning to service pursuant to subdivision (f) shall only inject or produce gas through the interior metal tubing and not through the annulus between the tubing and the well casing. The operator shall also conduct ongoing pressure monitoring and comply with any other requirements specified by the supervisor.

(h) The gas storage wells at the facility that are plugged and abandoned in accordance with Section 3208 pursuant to this section shall be periodically inspected by the operator for leaks using effective gas leak detection techniques such as optical gas imaging.

(i) (1) Before the completion of the gas storage well comprehensive safety review, production of natural gas from gas storage wells at the facility shall be limited to gas storage wells that have satisfactorily completed the testing and remediation required under subparagraph (B) of paragraph (4) of subdivision (c) unless insufficient production capacity is available. Only if production capacity supplied by the tested and remediated wells is demonstrably insufficient may the supervisor allow other gas storage wells to be used.

(2) The supervisor shall direct the operator of the facility to provide a plan to ensure, at the earliest possible time, the availability of sufficient gas production capacity using gas storage wells that have satisfactorily completed the testing and remediation required under subparagraph (B) of paragraph (4) of subdivision (c).

(j) With respect to the gas storage well comprehensive safety review at the facility, all testing, inspection and monitoring results reported to the division, gas storage well compliance status, any required remediation steps, and other safety review-related materials shall be posted in a timely manner by the division online on a public portion of its Internet Web site.

(k) This section shall remain in effect only until January 1, 2021, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2021, deletes or extends that date.

(Added by Stats. 2016, Ch. 14, Sec. 1. Effective May 10, 2016. Repealed as of January 1, 2021, by its own provisions.)

§ 3219. Any person engaged in operating any oil or gas well wherein high pressure gas is known to exist, 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.
(Enacted by Stats. 1939, Ch. 93.)

§ 3219.5. (a) On or before July 1, 2001, the Department of Conservation shall report to the Governor and the Legislature on options for ensuring the existence of blowout insurance for persons engaged in drilling or redrilling exploratory oil and gas wells in areas where abnormally high or unknown subsurface pressure gradients exist. The report shall consider all of the following:

(1) Types of insurance policies, which include control of well policies and policies that cover personal injury and property damage resulting from a catastrophic well blowout occurrence.

(2) Methods of setting insurance policy amounts.

(3) Forms of insurance, including third-party insurance, provision of an operator's proof of ability to respond in damages, a combination thereof, or other options.

(4) Areas of the state where abnormally high pressure gradients exist, or where insufficient data exists to draw conclusions regarding the subsurface pressure gradient.

(5) Any other factors the department deems appropriate to include in the report.

(b) The Department of Conservation shall consult with representatives of the oil industry and insurers in developing the report's recommendations.

(Added by Stats. 2000, Ch. 737, Sec. 5. Effective January 1, 2001.)

§ 3220. The owner or operator of any well on lands producing or reasonably presumed to contain oil or gas shall properly case it with water-tight and adequate casing, in accordance with methods approved by the supervisor or the district deputy, and shall, under his direction, shut off all water overlying and underlying oil-bearing or gas-bearing strata and prevent any water from penetrating such strata. The owner or operator shall also use every effort and endeavor to prevent damage to life, health, property, and natural resources; to shut out detrimental substances from strata containing water suitable for irrigation or domestic purposes and from surface water suitable for such purposes; and to prevent the infiltration of detrimental substances into such strata and into such surface water.

(Amended by Stats. 1976, Ch. 795.)

§ 3222. The owner or operator of any well shall, at the request of the supervisor, demonstrate that water from any well is not penetrating oil-bearing or gas-bearing strata or that detrimental substances are not infiltrating into underground or surface water suitable for irrigation or domestic purposes. The owner or operator shall give the district deputy adequate notice of the time at which he will demonstrate the test for shutoff in the well.

(Amended by Stats. 1976, Ch. 795.)

§ 3223. The district deputy or an inspector designated by the supervisor may be present at the test for shutoff. If the test is personally witnessed by the district deputy or an inspector at the site of the well, such district deputy or inspector shall make a report in writing of the result to the supervisor. A duplicate of the report shall be delivered to the owner.

If any test is unsatisfactory to the supervisor, he shall so notify the owner or operator and shall within five days after the completion of the test, order any additional work and tests necessary to properly shut off the well. In the order the supervisor shall designate a day upon which the owner or operator shall again test for shutoff, which day may, upon the application of the owner or operator, be changed from time to time at the discretion of the district deputy.
(Amended by Stats. 1976, Ch. 795.)

§ 3224. The supervisor shall order such tests or remedial work as in his judgment are necessary to prevent damage to life, health, property, and natural resources; to protect oil and gas deposits from damage by underground water; or to prevent the escape of water into underground formations, or to prevent the infiltration of detrimental substances into underground or surface water suitable for irrigation or domestic purposes, to the best interests of the neighboring property owners and the public. The order shall be in writing, signed by the supervisor. It shall be served upon the owner of the well, or his local agent, either personally or by mailing a copy of the order to the post office address given at the time the local agent is designated. If no local agent has been designated, the order shall be served by mailing a copy to the last known post office address of the owner, or if the owner is unknown, by posting a copy in a conspicuous place upon the property, and publishing it once a week for two successive weeks in some newspaper of general circulation throughout the county in which the well is located. The order shall specify the conditions sought to be remedied and the work necessary to protect such deposits from damage from underground water.
(Amended by Stats. 1970, Ch. 799.)

§ 3225. (a) An order of the supervisor or a district deputy issued pursuant to this chapter shall provide a clear and concise recitation of the acts or omissions with which the operator is charged. The order shall state all penalties and requirements imposed on the operator in connection with the acts or omissions charged and the order shall provide references to the provisions of this code and the regulations that support the imposition of the penalties and requirements.

(b) An order requiring an operator to cease and desist operations pursuant to Section 3270.3 shall specify the operations that the operator is required to cease and desist and shall provide a detailed explanation of the steps that the operator shall take before the supervisor will permit the operations to resume.

(c) An order of the supervisor or a district deputy shall be in writing and shall be served on the operator by personal service or by certified mail.

(d) When the supervisor or a district deputy issues a written order concerning an operation, an appeal may be made from the order pursuant to the procedures contained in Article 6 (commencing with Section 3350). The order shall inform the operator of its right to appeal the order.
(Amended by Stats. 2010, Ch. 264, Sec. 1. Effective January 1, 2011.)

§ 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.
(Amended by Stats. 2000, Ch. 737, Sec. 6. Effective January 1, 2001.)

§ 3226.3. The division shall annually provide to the State Water Resources Control Board and the California regional water quality control boards an inventory of all unlined oil and gas field sumps.
(Added by Stats. 2014, Ch. 561, Sec. 1. Effective January 1, 2015.)

§ 3227. (a) The owner of any well shall file with the supervisor, on or before the last day of each month, for the last preceding calendar month, a statement, in the form designated by the supervisor, showing all of the following:

(1) The amount of oil and gas produced from each well during the period indicated, together with the gravity of the oil, the amount of water produced from each well, estimated in accordance with methods approved by the supervisor, and the number of days during which fluid was produced from each well.

(2) The number of wells drilling, producing, injecting, or idle, that are owned or operated by the person.

(3) What disposition was made of the gas produced from each field, including the names of persons, if any, to whom the gas was delivered, and any other information regarding the gas and its disposition that the supervisor may require.

(4) What disposition was made of water produced from each field and the amount of fluid or gas injected into each well used for enhanced recovery, underground storage of hydrocarbons, or wastewater disposal, and any other information regarding those wells that the supervisor may require.

(5) The source of water, and volume of any water, reported in paragraph (4), including the water used to generate or make up the composition of any injected fluid or gas. Water volumes shall be reported by water source if more than one water source is used. The volume of untreated water suitable for domestic or irrigation purposes shall be reported. Commingled water shall be proportionally assigned to individual wells, as appropriate.

(6) The treatment of water and the use of treated or recycled water in oil and gas field activities, including, but not limited to, exploration, development, and production.

(7) (A) The specific disposition of all water used in or generated by oil and gas field activities, including water produced from each well reported pursuant to paragraph (1). Water volumes shall be reported by disposition method if more than one disposition method is used. Commingled water shall be proportionally assigned to individual wells, as appropriate.

(B) This information shall also include the temporary onsite storage of water, as or if appropriate, and the ultimate specific use, disposal method or method of recycling, or reuse of this water.

(b) Any operator that produces oil by the application of mining or other unconventional techniques shall file a report with the supervisor, on or before March 1 of each year, showing the amount of oil produced by those techniques in the preceding calendar year.

(c) (1) Upon request and making a satisfactory showing therefor, a longer filing period may be established by the supervisor for any particular owner or operator.

(2) Notwithstanding subdivision (a), the owner of any well shall file with the supervisor, on a quarterly basis, a statement containing the information required to be reported pursuant to paragraphs (5), (6), and (7) of subdivision (a) in the form designated by the supervisor.

(d) The division shall use a standardized form or format to facilitate reporting required pursuant to this section.

(e) The division shall use noncustom software, as feasible, to implement online reporting by the operator of the information required pursuant to paragraphs (5), (6), and (7) of subdivision (a). This information may be reported separately from other information required to be reported pursuant to this section.

(f) For purposes of this section, the following terms have the following meanings:

(1) “Source of water” or “water source” means any of the following:

(A) The well or wells, if commingled, from which the water was produced or extracted.

(B) The water supplier, if purchased or obtained from a supplier.

(C) The point of diversion of surface water.

(2) “Specific disposition of all water” means the identification of the ultimate specific use, disposal method or method of recycling, or reuse of the water. This includes, but is not limited to, the identification of any treatment or recycling method used, injection of the water into specific injection or disposal well or wells, if commingled, discharge of the water to surface water or sumps, and sale or transfer of the water to a named entity.

(Amended by Stats. 2014, Ch. 561, Sec. 2. Effective January 1, 2015.)

§ 3227.5. The supervisor shall compile from statements filed pursuant to Section 3227 and publish monthly statistics, within 90 days of the end of each calendar month, showing the amount of oil and gas produced in the state by field and pool, together with the number of wells producing or idle, all separately stated as to field and pool, with any other information that the supervisor deems proper.

(Added by Stats. 1981, Ch. 741, Sec. 8.)

§ 3227.6. As used in Sections 3227 and 3227.5, the following terms have the following meaning:

(a) “Field” means the same general surface area which is underlain, or reasonably appears to be underlain, by one or more pools.

(b) “Pool” means an underground reservoir containing, or appearing at the time of determination to contain, a common accumulation of crude petroleum oil or natural gas or both. Each zone of a general structure which is separated from any other zone in the structure is a separate pool.

(Added by Stats. 1981, Ch. 741, Sec. 9.)

§ 3228. Before abandoning any well in accordance with methods approved by the supervisor or the district deputy, and under his or her direction, the owner or operator shall isolate all oil-bearing or gas-bearing strata encountered in the well and shall use every effort and endeavor to protect any underground or surface water suitable for irrigation or domestic purposes from the infiltration or addition of any detrimental substances.

(Amended by Stats. 1984, Ch. 278, Sec. 8.)

§ 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.

(Repealed and added by Stats. 1973, Ch. 743.)

§ 3230. The notice of intention to abandon shall contain the following information:

(a) The total depth of the well to be abandoned.

(b) The complete casing record of the well, including plugs.

(c) Such other pertinent data as the supervisor may require on printed forms supplied by the division or on other forms acceptable to the supervisor.

(Repealed and added by Stats. 1973, Ch. 743.)

§ 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. *(Amended by Stats. 1988, Ch. 1077, Sec. 8.)*

§ 3233. (a) The division may develop field rules which establish volumetric thresholds for emergency reporting by the operator of oil discharges to land associated with onshore drilling, exploration, or production operations, where the oil discharges, because of the circumstances established pursuant to paragraph (1) of subdivision (c), cannot pass into or threaten the waters of the state. The division may not adopt field rules under this section, unless the State Water Resources Control Board and the Department of Fish and Game first concur with the volumetric reporting thresholds contained in the proposed field rules. Subchapter 1 (commencing with Section 1710) of Chapter 4 of Division 2 of Title 14 of the California Code of Regulations shall apply to the adoption and implementation of field rules authorized by this section.

(b) The authority granted to the division pursuant to subdivision (a) shall apply solely to oil fields located in the San Joaquin Valley, as designated by the division. The division shall adopt the field rules not later than January 1, 1998.

(c) For purposes of implementing this section, the division, the State Water Resources Control Board, and the Department of Fish and Game shall enter into an agreement that defines the process for establishing both of the following:

(1) The circumstances, such as engineered containment, under which oil discharges cannot pass into or threaten the waters of this state.

(2) The volumetric reporting thresholds that are applicable under the circumstances established pursuant to paragraph (1).

(d) In no case shall a reporting threshold established in the field rules, where the oil discharge cannot pass into or threaten the waters of this state, be less than one barrel (42 gallons), unless otherwise established by federal law or regulation. Until field rules are adopted, emergency reporting of oil discharges shall continue as required by existing statute and regulations.

(e) An operator who discharges oil in amounts less than the volumetric thresholds adopted by the division pursuant to this section is exempt from all applicable state and local reporting requirements. Discharges of oil in amounts equal to, or greater than, the volumetric thresholds adopted by the division pursuant to this section shall be immediately reported to the Office of Emergency Services which shall inform the division and other local or state agencies as required by Section 8589.7 of the Government Code. Reporting to the Office of Emergency Services shall be deemed to be in compliance with all applicable state and local reporting requirements.

(f) Oil discharges below the reporting thresholds established in the field rules shall be exempt from the emergency notification or reporting requirements, and any penalties provided for nonreporting, established under paragraph (1) of subdivision (a) of Section 13260 of the Water Code, subdivisions (a), (c), and (e) of Section 13272 of the Water Code, Section 25507 of the Health and Safety Code, Sections 8670.25.5 and 51018 of the Government Code, and subdivision (h) of Section 1722 of Title 14 of the California Code of Regulations. Oil discharge

reporting requirements under Section 51018 of the Government Code shall be applicable if a spill involves a fire or explosion.

(g) This section shall not affect existing reporting or notification requirements under federal law.

(h) Nothing in this section shall be construed to relieve any party of any responsibility established by statute, regulation, or order, to clean up or remediate any oil discharge, whether reportable or exempt pursuant to this section.

(i) Reporting provided pursuant to this section is not intended to prohibit any department or agency from seeking and obtaining any supplemental postreporting information to which the department or agency might otherwise be entitled.

(j) For purposes of this section, “oil” means naturally occurring crude oil.

(Amended by Stats. 2013, Ch. 352, Sec. 479. Effective September 26, 2013. Operative July 1, 2013, by Sec. 543 of Ch. 352.)

§ 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.

(e) The cessation of drilling operations occurs on the date of removal of drilling machinery from the well site.

(Amended by Stats. 1993, Ch. 1179, Sec. 3. Effective January 1, 1994.)

§ 3235. The supervisor may upon his own initiative or shall upon receipt of a written complaint from a person owning land or operating wells within a radius of one mile of any well or group of wells complained against make an investigation of the well or wells involved. The supervisor shall make a written report and order, stating the work required to repair the damage complained of, or stating that no work is required.

A copy of the order shall be delivered to the complainant, or if more than one, to each complainant, and, if the supervisor orders the damage repaired, a copy of the order shall be delivered to each of the owners, operators, or agents having in charge the well or wells upon which the work is to be done.

The order shall contain a statement of the conditions sought to be remedied or repaired and a statement of the work required by the supervisor to repair the condition. Service shall be made by mailing copies to such persons at the post office address given.

(Amended by Stats. 1976, Ch. 813.)

§ 3236. Any owner or operator, or employee thereof, who refuses to permit the supervisor or the district deputy, or his inspector, to inspect a well, or who willfully hinders or delays the enforcement of the provisions of this chapter, and every person, whether as principal, agent, servant, employee, or otherwise, who violates, fails, neglects, or refuses to comply with any of the provisions of this chapter, or who fails or neglects or refuses to furnish any report or record which may be required pursuant to the provisions of this chapter, or who willfully renders a false or fraudulent report, is guilty of a misdemeanor, punishable by a fine of not less than one hundred dollars ($100), nor more than one thousand dollars ($1,000), or by imprisonment for not exceeding six months, or by both such fine and imprisonment, for each such offense.

(Amended by Stats. 1983, Ch. 1092, Sec. 336. Effective September 27, 1983. Operative January 1, 1984, by Sec. 427 of Ch. 1092.)

§ 3236.5. (a) A person who violates this chapter or a regulation implementing this chapter is, at the supervisor’s discretion, subject to a civil penalty as described in subdivision (b) for each 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 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.

(5) The degree of culpability of the violator.

(6) Any economic benefit to the violator resulting from the violation.

(7) The violator's ability to pay the civil penalty amount, as determined based on information publicly available to the division.

(8) The supervisor's prosecution costs.

(b) (1) (A) A "well stimulation violation" is a violation of Article 3 (commencing with Section 3150) or the regulations implementing that article.

(B) The civil penalty amount for a well stimulation violation shall be not less than ten thousand dollars ($10,000) per day per violation and not more than twenty-five thousand dollars ($25,000) per day per violation.

(2) (A) A "major violation" is a violation that is not a well stimulation violation and that is one or more of the following:

(i) A violation that results in harm to persons or property or presents a significant threat to human health or the environment.

(ii) A knowing, willful, or intentional violation.

(iii) A chronic violation or one that is committed by a recalcitrant violator. In determining whether a violation is chronic or a violator is recalcitrant, the supervisor shall consider whether there is evidence indicating that the violator has engaged in a pattern of neglect or disregard with respect to applicable requirements.

(iv) A violation where the violator derived significant economic benefit, either by significantly reduced costs or a significant competitive advantage.

(B) The civil penalty amount for a major violation shall be not less than two thousand five hundred dollars ($2,500) per violation and not more than twenty-five thousand dollars ($25,000) per violation.

(3) (A) A "minor violation" is a violation that is neither a well stimulation violation nor a major violation.

(B) The civil penalty amount for a minor violation shall be not more than two thousand five hundred dollars ($2,500) per violation.

(4) At the supervisor's discretion, each day a major or minor violation continues or is not cured may be treated as a separate violation.

(c) 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.

(d) The supervisor may allow a supplemental environmental project in lieu of a portion of the civil penalty amount. The supplemental environmental project may not be more than 50 percent of the total civil penalty amount. Any amount collected under this section that is not allocated for a supplemental environmental project shall be deposited in the Oil and Gas Environmental Remediation Account established pursuant to Section 3261, until January 1, 2021. Commencing January 1, 2021, any amount collected under this section that is not allocated for a supplemental environmental project shall be deposited into the Oil, Gas, and Geothermal Administrative Fund.

(e) “Supplemental environmental project” means an environmentally beneficial project that a person, subject to an order of the supervisor imposing a civil penalty, voluntarily agrees to undertake in settlement of the action and to offset a portion of a civil penalty.
(Amended by Stats. 2016, Ch. 274, Sec. 1. Effective January 1, 2017.)

§ 3237. (a) (1) The supervisor or district deputy may order the plugging and abandonment of a well or the decommissioning of a production facility that has been deserted whether or not any damage is occurring or threatened by reason of that deserted well or production facility. The supervisor or district deputy shall determine from credible evidence whether a well or production facility is deserted.

(2) For purposes of paragraph (1), “credible evidence” includes, but is not limited to, the operational history of the well or production facility, the response or lack of response of the operator to inquiries and requests from the supervisor or district deputy, the extent of compliance by the operator with the requirements of this chapter, and other actions of the operator with regard to the well or production facility.

(3) A rebuttable presumption of desertion arises in any of the following situations:

(A) If a well has not been completed to production or injection and drilling machinery have been removed from the well site for at least six months.

(B) If a well’s production facilities or injection equipment has been removed from the well site for at least two years.

(C) If an operator has failed to comply with an order of the supervisor within the time provided by the order or has failed to challenge the order on a timely basis.

(D) If an operator fails to designate an agent as required by Section 3200.

(E) If a person who is to acquire a well or production facility that is subject to a purchase, transfer, assignment, conveyance, exchange, or other disposition fails to comply with Section 3202.

(F) If an operator has failed to maintain the access road to a well or production facility site passable to oilfield and emergency vehicles.

(4) The operator may rebut the presumptions of desertion set forth in paragraph (3) by demonstrating with credible evidence compliance with this division and that the well or

production facility has the potential for commercial production, including specific and detailed plans for future operations, and by providing a reasonable timetable for putting those plans into effect. The operator may rebut the presumption set forth in subparagraph (F) of paragraph (3) by repairing the access road.

(b) An order to plug and abandon a deserted well or to decommission a production facility may be appealed to the director pursuant to the procedures specified in Article 6 (commencing with Section 3350).

(c) (1) The current operator, as determined by the records of the supervisor, of a deserted well that produced oil, gas, or other hydrocarbons or was used for injection is responsible for the proper plugging and abandonment of the well or the decommissioning of deserted production facilities. If the supervisor determines that the current operator does not have the financial resources to fully cover the cost of plugging and abandoning the well or the decommissioning of deserted production facilities, the immediately preceding operator shall be responsible for the cost of plugging and abandoning the well or the decommissioning of deserted production facilities.

(2) The supervisor may continue to look seriatim to previous operators until an operator is found that the supervisor determines has the financial resources to cover the cost of plugging and abandoning the well or decommissioning deserted production facilities. However, the supervisor may not hold an operator responsible that made a valid transfer of ownership of the well prior to January 1, 1996.

(3) For purposes of this subdivision, “operator” includes a mineral interest owner who shall be held jointly liable for the well and attendant production facilities if the mineral interest owner has or had leased or otherwise conveyed the working interest in the well to another person, if in the lease or other conveyance, the mineral interest owner retained a right to control the well operations that exceeds the scope of an interest customarily reserved in a lease or other conveyance in the event of a default.

(4) No prior operator is liable for any of the costs of plugging and abandoning a well or decommissioning deserted production facilities by a subsequent operator if those costs are necessitated by the subsequent operator’s illegal operation of a well or production facility.

(5) If the supervisor is unable to determine that an operator who acquired ownership of a well after January 1, 1996, has the financial resources to fully cover the costs of plugging and abandonment of the well or decommissioning deserted production facilities, the supervisor may undertake plugging and abandonment of the well or decommissioning deserted production facilities pursuant to Article 4.2 (commencing with Section 3250).

(d) (1) Notwithstanding any other provision of this chapter, the supervisor or district deputy, at his or her sole discretion, may determine that a well that has been idle for 25 years or more and that fails to meet either of the following conditions is conclusive evidence of desertion, and may order the well abandoned:

(A) The operator is operating in compliance with a valid idle well management plan that is on file with the supervisor pursuant to paragraph (2) of subdivision (a) of Section 3206 or is covered by an indemnity bond provided under Section 3204, subdivision (a) of Section 3205, or subdivision (a) of Section 3205.2.

(B) The well meets the relevant testing standards for idle wells required under the regulations implementing this chapter.

(2) The supervisor or district deputy shall provide the operator a 90-day notice of warning once a determination has been reached pursuant to this subdivision that a well has been deserted. An operator may rebut the determination, made pursuant to paragraph (1), of the supervisor or district deputy by demonstrating compliance with subparagraphs (A) and (B) of paragraph (1).

(3) An order to plug and abandon a deserted well under this section due to the supervisor's or district deputy's determination of an operator's noncompliance with either subparagraph (A) or (B) of paragraph (1) may be appealed to the director pursuant to the procedures specified in Article 6 (commencing with Section 3350).
(Amended by Stats. 2017, Ch. 652, Sec. 4. Effective January 1, 2018.)

§ 3238. (a) For oil and gas produced in this state from a well that qualifies under Section 3251 or that has been inactive for a period of at least the preceding five consecutive years, the rate of the charges imposed pursuant to Sections 3402 and 3403 shall be reduced to zero for a period of 10 years. The supervisor or district deputy shall not permit an operator to undertake any work on wells qualifying under Section 3251 unless the mineral rights owner consents, in writing, to the work plan.

(b) An operator who undertakes any work on a well qualifying under Section 3251 shall have up to 90 days from the date the operator receives written consent from the supervisor to evaluate the well. On or before the 90 day evaluation period ends, the operator shall file with the supervisor a bond or security in an amount specified in Section 3204, 3205, or 3205.1, in accordance with the requirements of whichever of those sections is applicable to the well, if the well operations are to continue for a period in excess of the 90-day evaluation period. The conditions of the bond shall be the same as the conditions stated in Section 3204.

(c) A party may plug and abandon a well that qualifies under Section 3251 by obtaining all necessary rights to the well. That party shall be subject to the requirements of this chapter as an operator of the well, file with the supervisor the appropriate bond or security in an amount specified in Section 3204, 3205, or 3205.1, and complete the abandonment. If the abandonment is not completed, the supervisor may act under Section 3226 to complete the work.
(Amended by Stats. 2016, Ch. 272, Sec. 18. Effective January 1, 2017.)

Article 4.1. Abandoned Wells

§ 3240. The supervisor, in cooperation with appropriate state and local agencies, shall conduct a study of abandoned oil an gas wells located in those areas of the state with substantial potential for methane and other hazardous gas accumulations in order to determine the location, the extent of methane gas and other hazardous gas accumulations, and potential hazards from the abandoned wells.
(Added by Stats. 1985, Ch. 924, Sec. 1. Effective September 24, 1985.)

§ 3241. The supervisor, in cooperation with appropriate state and local agencies, shall develop a strategy for extracting existing accumulations of methane gas and other hazardous gas from abandoned oil and gas wells in high-risk areas identified by the supervisor in order to protect the health and safety of the public. The strategy shall also provide plans for the management of methane gas and other hazardous gas from wells in high-risk areas where no accumulations are discovered in order to prevent future accumulations of methane gas and other hazardous gas.
(Added by Stats. 1985, Ch. 924, Sec. 1. Effective September 24, 1985.)

Article 4.2. Hazardous Wells and Facilities [3250-3258]

§ 3250. The Legislature hereby finds and declares that hazardous and certain idle-deserted oil and gas wells and hazardous nd deserted facilities, as defined in this article, are public nuisances and that it is essential, in order to protect life, health, and natural resources that those oil and gas wells and facilities be abandoned, reabandoned, produced, or otherwise remedied to mitigate, minimize, or eliminate their danger to life, health, and natural resources.

The Legislature further finds and declares that, although the abatement of such public nuisances could be accomplished by means of an exercise of the regulatory power of the state, such regulatory abatement would result in unfairness and financial hardship for certain landowners, while also resulting in benefits to the public. The Legislature, therefore, finds and declares that the expenditure of funds to abate such nuisances as provided in this article is for a public purpose and finds and declares it to be the policy of this state that the cost of carrying out such abatement be charged to this state's producers of oil and gas as provided in Article 7 (commencing with Section 3400).
(Amended by Stats. 2017, Ch. 652, Sec. 6. Effective January 1, 2018.)

§ 3251. For the purposes of this article, the following definitions apply:

(a) "Deserted facility" means a production facility determined by the supervisor to be deserted under Section 3237 and for which there is no operator responsible for its decommissioning under Section 3237.

(b) "Decommission" has the same meaning and requirements, as applicable, as the definition established in Section 1760 of Title 14 of the California Code of Regulations.

(c) "Hazardous facility" means a production facility determined by the supervisor to be a potential danger to life, health, or natural resources and for which there is no operator determined by the supervisor to be responsible for its decommissioning under Section 3237.

(d) "Hazardous well" means an oil and gas well determined by the supervisor to be a potential danger to life, health, or natural resources and for which there is no operator determined by the supervisor to be responsible for its plugging and abandonment under Section 3237.

(e) “Idle-deserted well” means an oil and gas well determined by the supervisor to be deserted under Section 3237 and for which there is no operator responsible for its plugging and abandonment under Section 3237.
(Repealed and added by Stats. 2017, Ch. 652, Sec. 8. Effective January 1, 2018.)

§ 3251.5. (a) Notwithstanding Section 3251, a well shall be deemed a hazardous well if it has been determined by the supervisor to pose a present danger to life, health, or natural resources and has been abandoned in accordance with the requirements of the division in effect at the time of the abandonment 15 or more years before the date of the supervisor’s determination that it poses such a danger.

(b) Reabandonment initiated by the supervisor shall not be affected by the timeline established in this section.
(Added by Stats. 1987, Ch. 1322, Sec. 2.)

§ 3252. As used in this article, “natural resources” includes land, water, air, minerals, vegetation, wildlife, historical or aesthetic sites, or any other natural resource which, irrespective of ownership, contributes to the health, safety, welfare, or enjoyment of a substantial number of persons, or to the substantial balance of an ecological community.
(Added by Stats. 1976, Ch. 1090.)

§ 3253. If any provisions of this article or the application thereof in any circumstances or to any person or public agency is held invalid, the remainder of this article or the application thereof in other circumstances or to other persons or public agencies shall not be affected thereby.
(Added by Stats. 1976, Ch. 1090.)

§ 3254. This article shall be liberally construed and applied to promote its purposes.
(Added by Stats. 1976, Ch. 1090.)

§ 3255. (a) Notwithstanding any other provision of this division, the supervisor may order to be carried out, or may undertake, any of the following operations, as applicable, on any property in the vicinity of which, or on which, is located any well or facility that the supervisor determines to be a hazardous well, an idle-deserted well, a hazardous facility, or a deserted facility:

(1) Any inspection or tests necessary to determine what action, if any, would be appropriate to effectuate the purpose of this article.

(2) The abandonment of the well.

(3) The reabandonment of the well.

(4) The redrilling and production of an existing well for purposes of remedying, mitigating, minimizing, or eliminating danger to life, health, and natural resources.

(5) The drilling and production of a well for purposes of remedying, mitigating, minimizing, or eliminating danger to life, health, and natural resources.

(6) The decommissioning of hazardous or deserted facilities.

(7) Any other remedy or oilfield operation calculated to effectuate the purpose of this article.

(b) If, pursuant to this article, the supervisor orders that any operation be carried out with respect to a hazardous well, an idle-deserted well, a hazardous facility, or a deserted facility and that operation will, by virtue of the physical occupation or destruction of all or any part of the property or the extraction of oil or gas from the property, substantially interfere with the enjoyment of the property, the supervisor may acquire, as provided in Section 3256, a minimal interest in the property as is necessary to carry out the operation. No acquisition may be made pursuant to this subdivision unless the supervisor finds and determines that the public benefits to be derived therefrom in remedying, mitigating, minimizing, or eliminating danger to life, health, and natural resources will exceed the cost of the acquisition, irrespective of the manner in which the acquisition is to be funded.

(c) An order of the supervisor to carry out any of the operations listed in subdivision (a) may be appealed by the owner of the property pursuant to Article 6 (commencing with Section 3350), except that in the case of an emergency no stay of the supervisor's order shall accompany the appeal.

(Amended by Stats. 2017, Ch. 652, Sec. 9.) Effective January 1, 2018.)

§ 3256. (a) The division is hereby authorized to accept, and hold for and in the name of the state, by gift, exchange, purchase, negotiation, or eminent domain proceedings, any and all property or appurtenances of every kind and description thereto, including land, leases, easements, rights-of-way, oil, gas, or other mineral rights as the supervisor determines to be required and necessary to carry out operations to effect the purpose of this article.

(b) When the division cannot acquire any such necessary property or interest therein by agreement with the owner, any such property or interest therein authorized to be acquired under this article shall be acquired pursuant to provisions of the Property Acquisition Law (Part 11 (commencing with Section 15850) of Division 3 of Title 2 of the Government Code); except that, notwithstanding any provision thereof, the division, in the name of and for the state, may take immediate possession and use of any property required to carry out operations to effect the purpose of this article after eminent domain proceedings are first commenced according to law in a court of competent jurisdiction, and thereupon giving such security as the court in which the proceedings are pending directs to secure to the owner of the property sought to be taken immediate compensation for the taking and any damage incident thereto, including damages sustained by reason of an adjudication that there is no necessity for taking the property.

(Added by Stats. 1976, Ch. 1090.)

§ 3257. To effect the purpose of this article, the division is authorized to enter into agreements with any person, public agency, corporation, or other entity for the management or operation of property acquired or for the conduct of any operation ordered pursuant to this article.

(Added by Stats. 1976, Ch. 1090.)

§ 3258. (a) The division shall not make expenditures pursuant to this article that exceed in any one fiscal year:

(1) Three million dollars ($3,000,000) commencing on July 1, 2018, for the 2018–19 fiscal year, and continuing for three fiscal years thereafter.

(2) One million dollars ($1,000,000), commencing with the 2022–23 fiscal year.

(b) Moneys expended pursuant to this article shall be used exclusively for plugging and abandoning hazardous or idle-deserted wells and decommissioning hazardous or deserted facilities and shall not be used for nonwell or nonproduction facility-related activities and payments.

(c) The division shall develop criteria for determining the priority of plugging and abandoning hazardous or idle-deserted wells and decommissioning hazardous or deserted facilities to be remediated pursuant to this article. The Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code) does not apply to the development of criteria by the division pursuant to this subdivision.

(d) (1) (A) On October 1, 2020, the department shall report to the Legislature on the number of hazardous wells, idle-deserted wells, deserted facilities, and hazardous facilities remaining, the estimated costs of abandoning and decommissioning those wells and facilities, and a timeline for future abandonment and decommissioning of those wells and facilities with a specific schedule of goals.

(B) As part of the report required in subparagraph (A), the department shall provide recommendations to the Legislature for improving and optimizing the involvement of local agencies in the process of plugging and abandoning wells and decommissioning facilities. In drafting these recommendations, the department shall consider factors unique to each of the division's districts, and shall consult with local agencies in developing recommendations.

(2) On October 1, 2023, the department shall provide to the Legislature an update on the report required in paragraph (1) that describes the total costs, average costs per well and facility, the number of wells plugged and abandoned, the number of facilities decommissioned, the total number of projects completed, and any additional wells and facilities identified by the department requiring abandonment or decommissioning.

(3) The report and update to the report required to be submitted under this subdivision shall be submitted in compliance with Section 9795 of the Government Code.

(4) The requirement for submitting a report imposed under this subdivision is inoperative on October 1, 2027, pursuant to Section 10231.5 of the Government Code.

(Amended by Stats. 2017, Ch. 652, Sec. 10. Effective January 1, 2018.)

Article 4.3. Oil and Gas Environmental Remediation Account

§ 3260. For purposes of this article, "account" means the Oil and Gas Environmental Remediation Account established under Setion 3261.

(Repealed and added by Stats. 2016, Ch. 274, Sec. 3. Effective January 1, 2017. Repealed as of January 1, 2021, pursuant to Section 3263.)

§ 3261. (a) Notwithstanding any other provision of this chapter, including the expenditure limitations of Section 3258, the division shall administer and manage the Oil and Gas Environmental Remediation Account, which is hereby established in the Oil, Gas, and Geothermal Administrative Fund.

(b) Moneys in the account shall be used, upon appropriation by the Legislature, to plug and abandon oil and gas wells, decommission attendant facilities, or otherwise remediate sites that the supervisor determines could pose a danger to life, health, water quality, wildlife, or natural resources if there is no operator determined by the supervisor to be responsible for remediation pursuant to subdivision (c) of Section 3237 or who is able to respond.
(Repealed and added by Stats. 2016, Ch. 274, Sec. 3. Effective January 1, 2017. Repealed as of January 1, 2021, pursuant to Section 3263.)

§ 3262. The division may adopt regulations to implement this article.
(Repealed and added by Stats. 2016, Ch. 274, Sec. 3. Effective January 1, 2017. Repealed as of January 1, 2021, pursuant to Section 3263.)

§ 3263. This article shall remain in effect only until January 1, 2021, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2021, deletes or extends that date.
(Repealed and added by Stats. 2016, Ch. 274, Sec. 3. Effective January 1, 2017. Repealed as of January 1, 2021, by its own provisions. Note: Repeal affects Article 4.3, commencing with Section 3260.)

Article 4.4. Regulation of Production Facilities

§ 3270. (a) The division shall, by regulation, prescribe minimum facility maintenance standards for all production facilitis in the state. The regulations shall include, but are not limited to, standards for all of the following:

(1) Leak detection.

(2) Corrosion prevention and testing.

(3) Tank inspection and cleaning.

(4) Valve and gauge maintenance, and secondary containment maintenance.

(5) Other facility or equipment maintenance that the supervisor deems important for the proper operation of production facilities and that the supervisor determines are necessary to prevent damage to life, health, property, and natural resources; damage to underground oil and gas deposits from infiltrating water and other causes; loss of oil, gas, or reservoir energy; and damage to underground and surface waters suitable for irrigation or domestic purposes by the infiltration of, or the addition of, detrimental substances.

(b) An operator who constructs, acquires, maintains, or alters an oil well or a production facility shall comply with the standards prescribed pursuant to subdivision (a).

(c) In a form and at a time prescribed by the division in regulation, an operator shall notify the supervisor of the construction, alteration, or decommissioning of a production facility.

(d) An operator shall maintain at the production facility's local office records of maintenance and repair operations, tests, and inspections, and shall provide the supervisor with access to these records at all times during normal business hours and with copies of the records immediately, upon request.

(Added by Stats. 2008, Ch. 562, Sec. 9. Effective January 1, 2009.)

§ 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.

(Added by Stats. 2008, Ch. 562, Sec. 9. Effective January 1, 2009.)

§ 3270.2. The division shall inspect production facilities to ensure compliance with the standards prescribed in the regulations promulgated pursuant to subdivision (a) of Section 3270.

(Added by Stats. 2008, Ch. 562, Sec. 9. Effective January 1, 2009.)

§ 3270.3. In addition to any other remedy provided by law, the supervisor, upon his or her determination or that of the district deputy that a production facility is being operated in violation of the standards prescribed in subdivision (a) of Section 3270, may issue a cease and desist order to a production facility operator requiring the operator to cease operation until the operator demonstrates, to the satisfaction of the supervisor, that the violation has been corrected.

(Added by Stats. 2008, Ch. 562, Sec. 9. Effective January 1, 2009.)

§ 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.

(Added by Stats. 2008, Ch. 562, Sec. 9. Effective January 1, 2009.)

§ 3270.5. (a) (1) By January 1, 2018, the division shall review and evaluate, and update as appropriate, its existing regulations regarding all active gas pipelines that are four inches or less in diameter, located in sensitive areas, and 10 years old or older. The division shall make a written finding of its review and evaluation of these pipelines.

(2) In its review and evaluation, the division shall consider existing pipeline integrity, pipeline leak detection, and other pipeline assessment requirements imposed by other regulators to determine which of these forms of assessment meet the division's needs.

(3) The regulations shall ensure the integrity and operation of these active gas pipelines pursuant to Sections 3106 and 3270.

(b) (1) By January 1, 2018, an operator of an active gas pipeline in a sensitive area shall submit to the division, as part of compliance with pipeline management plan requirements pursuant to Section 1774.2 of Title 14 of the California Code of Regulations, an up-to-date and accurate map identifying the location of the pipeline and other up-to-date and accurate locational information of the pipeline as determined and in a format specified by the division.

(2) The division shall perform random periodic spot check inspections to ensure that the information submitted pursuant to paragraph (1) is accurately reported.

(3) The division shall maintain a list of active gas pipelines in sensitive areas.

(c) For purposes of this section, the following terms are defined as follows:

(1) "Active gas pipeline" means an inservice gas pipeline regardless of diameter that is within the division's jurisdiction.

(2) "Sensitive area" means any of the following:

(A) An area containing a building intended for human occupancy, such as a residence, school, hospital, or business, that is located within 300 feet of an active gas pipeline and that is not necessary to the operation of the pipeline.

(B) An area determined by the supervisor to present significant potential threat to life, health, property, or natural resources in the event of a leak from an active gas pipeline.

(C) An area determined by the supervisor to have an active gas pipeline that has a history of chronic leaks.

(d) This section does not affect or limit the authority of the supervisor pursuant to Section 3106, 3270, or any other section of this code, or any regulation implementing those sections.

(Added by Stats. 2015, Ch. 601, Sec. 3. Effective January 1, 2016.)

§ 3270.6. Upon the discovery of a leak from an active gas pipeline that is within a sensitive area, as defined in Section 3270.5, the owner or operator of the pipeline shall promptly notify the division and the local health officer, or his or her designee, of the jurisdiction in which the leak is located.
(Added by Stats. 2015, Ch. 601, Sec. 4. Effective January 1, 2016.)

Article 4.5. Interstate Cooperation in Oil and Gas Conservation

§ 3275. The Legislature of the State of California hereby ratifies and approves "The Interstate Compact to Conserve Oil andGas," and the amendment, extension, and renewal thereof, as set forth in Section 3276. The provisions of the compact shall become the law of this state upon the compact becoming operative as provided in Article VIII of the compact.
(Added by Stats. 1974, Ch. 1335.)

§ 3276. The provisions of the interstate compact referred to in Section 3275 are as follows:
An Agreement to Amend, Extend and Renew the Interstate Compact to Conserve Oil and Gas

Whereas, On the 16th day of February 1935, in the City of Dallas, Texas, there was executed "An Interstate Compact to Conserve Oil and Gas" which was thereafter formally ratified and approved by the States of Oklahoma, Texas, New Mexico, Illinois, Colorado and Kansas, the original of which is now on deposit with the Department of State of the United States;

Whereas, Effective as of September 1, 1971, the several compacting states deem it advisable to amend said compact so as to provide that upon the giving of congressional consent thereto in its amended form, said compact will remain in effect until Congress withdraws such consent;

Whereas, The original of said compact as so amended will, upon execution thereof, be deposited promptly with the Department of State of the United States, a true copy of which follows:

An Interstate Compact to Conserve Oil and Gas

Article I

This agreement may become effective within any compacting state at any time as prescribed by that state, and shall become effective within those states ratifying it whenever any three of the States of Texas, Oklahoma, California, Kansas, and New Mexico have ratified and Congress

has given its consent. Any oil-producing state may become a party hereto as hereinafter provided.

Article II

The purpose of this compact is to conserve oil and gas by the prevention of physical waste thereof from any cause.

Article III

Each state bound hereby agrees that within a reasonable time it will enact laws, or if the laws have been enacted, then it agrees to continue the same in force, to accomplish within reasonable limits the prevention of:

(a) The operation of any oil well with an inefficient gas-oil ratio.

(b) The drowning with water of any stratum capable of producing oil or gas, or both oil and gas, in paying quantities.

(c) The avoidable escape into the open air or the wasteful burning of gas from a natural gas well.

(d) The creation of unnecessary fire hazards.

(e) The drilling, equipping, locating, spacing or operating of a well or wells so as to bring about physical waste of oil or gas or loss in the ultimate recovery thereof.

(f) The inefficient, excessive or improper use of the reservoir energy in producing any well.

The enumeration of the foregoing subjects shall not limit the scope of the authority of any state.

Article IV

Each state bound hereby agrees that it will, within a reasonable time, enact statutes, or if such statutes have been enacted then that it will continue the same in force, providing in effect that oil produced in violation of its valid oil and/or gas conservation statutes or any valid rule, order or regulation promulgated thereunder, shall be denied access to commerce; and providing for stringent penalties for the waste of either oil or gas.

Article V

It is not the purpose of this compact to authorize the states joining herein to limit the production of oil or gas for the purpose of stabilizing or fixing the price thereof, or create or perpetuate monopoly, or to promote regimentation, but is limited to the purpose of conserving oil and gas and preventing the avoidable waste thereof within reasonable limitations.

Article VI

Each state joining herein shall appoint one representative to a commission hereby constituted and designated as The Interstate Oil Compact Commission, the duty of which said Commission shall be to make inquiry and ascertain from time to time such methods, practices, circumstances, and conditions as may be disclosed for bringing about conservation and the prevention of physical waste of oil and gas, and at such intervals as said Commission deems beneficial it shall report its findings and recommendations to the several states for adoption or rejection.

The Commission shall have power to recommend the coordination of the exercise of the police powers of the several states within their several jurisdictions to promote the maximum ultimate recovery from the petroleum reserves of said states, and to recommend measures for the maximum ultimate recovery of oil and gas. Said Commission shall organize and adopt suitable rules and regulations for the conduct of its business.

No action shall be taken by the Commission except: (1) By the affirmative votes of the majority of the whole number of the compacting states represented at any meeting, and (2) by a concurring vote of a majority in interest of the compacting states at said meeting, such interest to be determined as follows: Such vote of each state shall be in the decimal proportion fixed by the ratio of its daily average production during the preceding calendar half-year to the daily average production of the compacting states during said period.

Article VII

No state by joining herein shall become financially obligated to any other state, nor shall the breach of the terms hereof by any state subject such state to financial responsibility to the other states joining herein.

Article VIII

This compact shall continue in effect until Congress withdraws its consent. But any state joining herein may, upon sixty (60) days' notice, withdraw herefrom.

The representatives of the signatory states have signed this agreement in a single original which shall be deposited in the archives of the Department of State of the United States, and a duly certified copy shall be forwarded to the Governor of each of the signatory states.

This compact shall become effective when ratified and approved as provided in Article I. Any oil-producing state may become a party thereto by affixing its signature to a counterpart to be similarly deposited, certified, and ratified.

Done in the City of Dallas, Texas, this sixteenth day of February, 1935.

Whereas, The said “Interstate Compact to Conserve Oil and Gas” in its initial form has heretofore been duly renewed and extended with the consent of the Congress to September 1, 1971; and

Whereas, It is desired to amend said “Interstate Compact to Conserve Oil and Gas” effective September 1, 1971, and to renew and extend said compact as so amended:

Now, therefore, this writing witnesseth:

It is hereby agreed that effective September 1, 1971, the Compact entitled “An Interstate Compact to Conserve Oil and Gas” executed within the City of Dallas, Texas, on the 16th day of February, 1935, and now on deposit with the Department of State of the United States, be and the same is hereby amended by amending the first paragraph of Article VII thereof to read as follows:

“This compact shall continue in effect until Congress withdraws its consent. But any state joining herein may, upon sixty (60) days’ notice, withdraw herefrom.”

and that said compact as so amended be, and the same is hereby renewed and extended. This agreement shall become effective when executed, ratified, and approved as provided in Article I of said compact as so amended.

The signatory States have executed this agreement in a single original which shall be deposited in the archives of the Department of State of the United States and a duly certified copy thereof shall be forwarded to the Governor of each of the signatory States. Any oil-producing State may become a party hereto by executing a counterpart of this agreement to be similarly deposited, certified, and ratified.

Executed by the several undersigned States, at their several State capitols, through their proper officials on the dates as shown, as duly authorized by statutes and resolutions, subject to the limitations and qualifications of the acts of the respective State Legislatures.
(Added by Stats. 1974, Ch. 1335.)

§ 3277. The Governor is hereby designated as the official representative of the State of California on the Interstate Oil Compact Commission provided for in the compact ratified by this article. The Governor shall exercise and perform for the State of California all the powers and duties imposed by the compact upon the representative to the Interstate Oil Compact Commission. The Director of Conservation is hereby designated to be the assistant representative and he or she shall act as the official representative of the State of California on the Interstate Oil Compact Commission when the authority to so act is delegated to him or her by the Governor. In his or her absence, the State Oil and Gas Supervisor is hereby designated to be the assistant representative. The Executive Officer of the State Lands Commission is

hereby designated to be the associate representative. In addition, both the assistant representative and the associate representative shall perform such other duties as the Governor may designate which are necessary to enable the State of California to cooperate fully in accomplishing the objectives of the compact.
(Amended by Stats. 1991, Ch. 701, Sec. 2.)

Article 5. Unreasonable Waste of Gas

§ 3300. The unreasonable waste of natural gas by the act, omission, sufferance, or insistence of the lessor, lessee or opertor of any land containing oil or gas, or both, whether before or after the removal of gasoline from the gas, is opposed to the public interest and is unlawful. The blowing, release, or escape of gas into the air shall be prima facie evidence of unreasonable waste.
(Enacted by Stats. 1939, Ch. 93.)

§ 3301. Whenever the supervisor finds that it is in the interest of the protection of oil or gas from unreasonable waste, the lessors, lessees, operators or other persons owning or controlling royalty or other interests in the separate properties of the same producing or prospective oil or gas field, may, with the approval of the supervisor, enter into agreements for the purpose of bringing about the cooperative development and operation of all or a part or parts of the field, or for the purpose of bringing about the development or operation of all or a part or parts of such field as a unit, or for the purpose of fixing the time, location, and manner of drilling and operating of wells for the production of oil or gas, or providing for the return of gas into the sub-surface of the earth for the purpose of storage or the repressuring of an oil or gas field. Any such agreement shall bind the successors and assigns of the parties thereto in the land affected thereby and shall be enforceable in an action for specific performance.
(Enacted by Stats. 1939, Ch. 93.)

§ 3302. Upon complaint being made to the director by any person operating in any oil field that there is occurring or threatened an unreasonable waste of gas in any field or fields, and when a petition is filed with the director requesting that a hearing be held to consider whether such waste is occurring or threatened, if it appears to the director that there is probable cause for such complaint, he shall order the supervisor to hold such a hearing and to fix a time and place therefor. A hearing may also be ordered by the director on the application of the supervisor.
(Enacted by Stats. 1939, Ch. 93.)

§ 3303. Notice of the time and place of the hearing shall be given by publication in a newspaper printed and published in the county in which the unreasonable waste of gas is alleged to be taking place or to be threatened. The notice shall specify the commonly accepted name or a general description of the field or locality. Publication shall be daily for five days prior to the time of the hearing. The supervisor shall also send notice by mail to each lessor, lessee,

or operator, known to him, of any well in the field. Failure to send such written notice shall not affect the validity of the proceeding.
(Enacted by Stats. 1939, Ch. 93.)

§ 3304. The place of hearing shall be in the county or in any of the counties in which the unreasonable waste of gas is alleged to be taking place or to be threatened.
(Enacted by Stats. 1939, Ch. 93.)

§ 3305. At the hearing all persons interested are entitled to be heard and may present testimony either oral or written. All witnesses shall be sworn, and a transcript of the proceedings shall be kept by a stenographic reporter. All the provisions of this chapter in reference to the subpoenaing of witnesses and the taking of depositions are applicable to the hearing before the supervisor. On the request of the supervisor, a hearing officer in the Office of Administrative Hearings may assist and rule upon legal matters, but such officer shall not make the determination specified in Section 3306.
(Amended by Stats. 2004, Ch. 183, Sec. 287. Effective January 1, 2005.)

§ 3306. Upon the conclusion of the hearing, the supervisor shall determine whether or not there is an unreasonable waste of gas in the field, in existence or threatened, and shall also determine the extent to which the waste of gas, occurring or threatened, is unreasonable.
(Enacted by Stats. 1939, Ch. 93.)

§ 3307. If it appears that gas is being produced from any oil well or wells in quantities exceeding a reasonable proportion to the amount of oil produced from the same well or wells, even though it is shown that such excess gas is being used in the generation of light, heat, power, or any other industrial purpose, the supervisor shall hold that such excess production of gas is unreasonable waste.
(Amended by Stats. 1955, Ch. 1670.)

§ 3308. If the waste of gas is found to be unreasonable, an order shall be made by the supervisor directing that the unreasonable waste of gas be discontinued or refrained from to the extent stated in the order. The sale or delivery of gas to another by a lessor, lessee, or operator shall be no defense, excuse, or reason for any lessor, lessee, or operator disobeying an order of the supervisor directing the discontinuance or curtailment of the production of the well or wells from which gas is being produced.
(Amended by Stats. 1955, Ch. 1670.)

§ 3309. A copy of the supervisor's order shall be posted in a conspicuous place upon the property affected, and the order shall become final 10 days after posting, unless it is appealed from as provided in
Section 3350.
(Amended by Stats. 1981, Ch. 741, Sec. 15.)

§ 3310. When the decision of the supervisor that there is an unreasonable waste of gas occurring or threatened has become final, a certified copy thereof shall be filed with the director. The director, unless the order is complied with voluntarily, shall have proceedings instituted in the name of the people of the State of California to enjoin the unreasonable waste of gas.

Such proceedings shall be instituted in the superior court of the county in which is situated the property, or any part thereof, where the wastage is occurring or is threatened. Any number of defendants may be joined in the same proceeding, although their properties and interests may be severally owned and their actual or threatened unreasonable wastage of gas may be separate and distinct, if the actual or threatened unreasonable waste by all of the defendants is in, or with reference to, the same producing or prospective oil or gas field.
(Amended by Stats. 1974, Ch. 765.)

§ 3311. In those suits, a restraining order shall not be issued ex parte, and a temporary or permanent injunction issued in the proceedings shall not be refused or dissolved or stayed pending appeal upon the
giving of any bond or undertaking or otherwise, but otherwise the procedure, including the procedure on appeal, shall be conformable with the provisions of Chapter 3 (commencing with Section 525) of Title 7 of Part 2 of the Code of Civil Procedure.

In the proceedings, the findings of the supervisor, unless set aside, or except to the extent modified, by the director, shall constitute prima facie evidence of the unreasonable wastage of gas therein found to be occurring or threatened.
(Amended by Stats. 1981, Ch. 714, Sec. 345.)

§ 3312. Whenever it appears to the director that the owners, lessors, lessees, or operators of any well or wells producing oil and gas or oil or gas are causing or permitting an unreasonable waste of gas, he may institute, or have proceedings instituted, in the name of the people of the State of California, to enjoin the unreasonable waste of gas regardless of whether proceedings have or have not been instituted under sections 3302 to 3305, and regardless of whether an order has or has not been made therein.

Such proceedings shall be instituted in the superior court of the county in which is situated the well or wells, or any thereof, from which the unreasonable waste of gas is occurring. The owners, lessors, lessees, or operators causing or permitting an unreasonable waste of gas in the same oil or gas field may be made parties to the action, although their properties and interests may be separately owned and their unreasonable waste separate and distinct.
(Enacted by Stats. 1939, Ch. 93.)

§ 3313. In such suits a restraining order shall not be issued ex parte, and a temporary or permanent injunction issued in such proceedings shall not be refused or dissolved or stayed

pending appeal upon the giving of any bond or undertaking or otherwise, but otherwise the procedure shall be governed by the provisions of Chapter III of Title VII of Part 2 of the Code of Civil Procedure.
(Enacted by Stats. 1939, Ch. 93.)

§ 3314. Proceedings to enjoin waste as contemplated by this chapter shall be special proceedings restricted to the single issue whether gas is being produced or is threatened to be produced in unreasonably wasteful quantities and the extent to which such production should be enjoined on behalf of the State of California.
(Added by Stats. 1955, Ch. 1670.)

Article 5.5. Subsidence

§ 3315. It is hereby found and determined:

(a) That the people of the State of California have a direct and primary interet in arresting and ameliorating the subsidence and compaction of land in those areas overlying or immediately adjacent to producing oil or gas pools within the State where valuable buildings, harbor installations and other improvements are being injured or imperiled or where subsidence is interfering or may interfere with commerce, navigation and fishery, or where substantial portions of such areas may be inundated if subsidence continues, thereby endangering life, health, safety, public peace, welfare and property;

(b) That in certain of such areas of the State land already has subsided to a great extent and is continuing to subside at an alarming rate, resulting in injury to surface and underground improvements through land movement or the threat of inundation from the sea, necessitating extensive filling and construction of levees and dikes; and requiring the raising, repair and reconstruction of highways, bridges, buildings, utility and transportation facilities, vital national defense installations and other improvements;

(c) That the results of studies by qualified engineers, which have been conducted in certain of such affected areas, indicate that the only feasible method that can be expected to arrest or ameliorate subsidence in such areas is by repressuring subsurface oil and gas formations thereunder and that such repressuring operations, in addition thereto, should increase the amount of oil ultimately recoverable from the formations underlying such areas and protect the oil or gas in such lands from unreasonable waste;

(d) That unit or co-operative operation of such pool or pools in such areas is necessary in order to repressure or maintain pressure in said pool or pools in order to arrest or ameliorate subsidence;

(e) That, in view of the special characteristics of the subsidence problem in such areas, it is necessary, therefore, that the State of California, through authority vested in the State Oil and Gas Supervisor, exercise its power and jurisdiction to require the carrying on of repressuring operations which will tend to arrest or ameliorate subsidence by maintaining or replenishing underground pressures in formations underlying such areas, thereby safeguarding life, health,

property, and the public welfare, and to require such co-operative or unit plan or plans as may be necessary for repressuring which tend to arrest or ameliorate subsidence subject to the limitations on the authority of the supervisor contained in this article;

(f) That it is also desirable to encourage the carrying on of voluntary repressuring operations pursuant to voluntary unit or co-operative agreements in order to arrest or ameliorate subsidence, and as a means to that end it is necessary that the power of eminent domain be exercised to acquire the properties of nonconsenting owners of interests in oil and gas under the circumstances and subject to the limitations set forth in this article.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3316. Unless the context otherwise requires, the general provisions and definitions contained in this chapter govern the construction of this article.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3316.1. As used in this article, “person” means any natural person, corporation, association, partnership, limited liability company, joint venture, receiver, trustee, executor, administrator, guardian, fiduciary or other representative of any kind and includes the state and any city, county, city and county, district or any department, agency or instrumentality of the state or of any governmental subdivision whatsoever.
(Amended by Stats. 1994, Ch. 1010, Sec. 204. Effective January 1, 1995.)

§ 3316.2. “Pool” means an underground reservoir containing, or appearing at the time of determination to contain, a common accumulation of crude petroleum oil or natural gas or both. Each zone of a general
structure which is separated from any other zone in the structure is a separate pool.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3316.3. “Field” means the same general surface area which is underlaid or reasonably appears to be underlaid by one or more pools.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3316.4. “Repressuring operations” means gas injection operations, water injection operations, water flooding operations, or any combination thereof, or any other operations intended primarily to arrest or ameliorate subsidence, or to restore or increase the pressure in a pool, or to avoid or minimize a reduction of pressure within a pool.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3316.5. “Subsidence” means sinking, lowering, collapsing, compaction or other movement of the land whether covered by water or not.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3316.6. “Unit area” means all or part of a pool or pools included within the area embraced by a unit created pursuant to an order of the supervisor as provided in Section 3322, or created by a unit agreement voluntarily entered into.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3316.7. “Unit production” means all oil, gas and other hydrocarbon substances produced from a unit area from the effective date of the order of the supervisor creating the unit, or from the effective date of a
unit agreement approved by the supervisor.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3316.8. “Fieldwide repressuring plan” means a plan based upon a competent engineering study or studies, prepared by a petroleum engineer licensed by the State, of all the pools in a field, designed so as to provide for a program of pressure restoration or maintenance as to most effectively arrest or ameliorate subsidence with respect to those land areas referred to in Section 3315.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3316.9. “Unit agreement” means and includes, in addition to the unit agreement, any unit operating agreement, consent agreement and other agreement entered into in connection with and supplemental to such unit agreement, but shall not include any preliminary agreement confined to effectuating any exchange of interests in tracts of land which the parties to such preliminary agreement may desire.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3316.10. “Increased production” means that portion of the oil or gas produced from all wells bottomed within a unit area, or within any other area where the supervisor finds repressuring operations feasible, during any year over and above the oil or gas that would have been produced from all wells bottomed within the same area during the identical year at the projected rate of decline for the wells in the absence of repressuring operations conducted pursuant to this article.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3316.11. “Working interest” means an interest held in lands by virtue of fee title, including lands held in trust, a lease, operating agreement or otherwise, under which the owner of such interest has the right to drill for, develop and produce oil and gas. A working interest shall be deemed vested in the owner thereof even though his right to drill or produce may be delegated to an operator under a drilling and operating agreement, unit agreement, or other type of operating agreement.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3316.12. "Working interest owner" means a person owning a working interest.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3316.13. "Royalty interest" means a right to or interest in oil and gas produced from any lands or in the proceeds of the first sale thereof other than a working interest.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3316.14. "Royalty interest owner" means a person owning a royalty interest.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3316.15. "Unit operator" means the person or persons designated by the unit agreement or in accordance with subdivisions (g) and (j) of Section 3322 as operator or operators of the unitized area.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3316.16. "Land" means both surface and mineral rights.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3317. This article applies only to lands, referred to in Section 3315, overlying or immediately adjacent to a producing pool or pools, when such lands are subsiding, portions of which lands are subject to threat of inundation from the sea and which subsidence is endangering the life, health and safety of persons or which is damaging or is threatening to cause damage to, any surface or underground improvements located on such lands overlying or immediately adjacent to such pool or pools. The area within the exterior boundaries established pursuant to Section 3336 shall be known as a "subsidence area."
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3318. An order of the supervisor which involves tide or submerged lands which may have been granted to any city, county, or city and county, or district, shall prohibit any impairment of the public trust for commerce, navigation, or fisheries to which the granted lands are subject. The Legislature hereby finds and declares that compliance with any such order containing such prohibition will not impair the public trust for commerce, navigation, or fisheries to which the granted lands are subject, and that any acts or things done pursuant to the terms thereof or resulting therefrom are consistent with and not in violation of the terms and conditions of any such grant or of any trusts, restrictions, or conditions of appertaining thereto. No such order shall effect or result in, or be construed to effect or result in a revocation of or change in any trust pertaining to the granted lands, or in any grant, conveyance, alienation, or transfer of the granted lands, or any part thereof, to any other individual, firm, or corporation, even though such order provides for the pooling of oil, gas, or other hydrocarbon substances produced from the granted lands with oil, gas, or other hydrocarbon substances produced from other lands, or results in the migration of any oil, gas or other hydrocarbon substances between the granted lands and other lands. If any of the granted lands are contained in any unit created or approved

by an order of the supervisor, and, when applicable, the State Lands Commission, then any trust, restrictions, or conditions pertaining to any production from the granted lands included within such a unit, or to any proceeds from such production, shall apply only to that part of the production or that part of the proceeds therefrom which is allocated to such city, county, or city and county or district on account of the granted lands under any such order, and shall not apply to any other production or the proceeds therefrom, whether or not the same may have been produced from the granted lands or other lands.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3319. (a) The supervisor, upon the supervisor's own motion, may, or shall, upon the application of any city, county, or city and county, any part of which is in a subsidence area, or any contractor or lessee for the production of oil or gas therefor, or any person having a working interest therein, who has submitted therewith an engineering report and plan for fieldwide repressuring operations in the pool or pools in a field in order to arrest or ameliorate subsidence therein, prepared by a petroleum engineer licensed by the state, hold a public hearing. The public hearing shall, at a minimum, consider the need for repressuring operations in all of the pool or pools in order to arrest or ameliorate subsidence. The supervisor may order applications relating to the same field to be consolidated for the public hearing thereon.

(b) Before any application shall be considered, each applicant shall pay to the supervisor for deposit in the General Fund a sum of money estimated by the supervisor to be equivalent to the amount of costs necessary to publish and mail notices, to employ stenographic reporters, to prepare a daily transcript of such hearing for use by the supervisor, to pay any rental that may be necessary to provide quarters for the hearing and to reimburse the Department of Conservation for any charges imposed upon it for the services of a hearing officer or members of the Attorney General's staff in conjunction with the hearing. If more than one application is filed, the costs shall be equally charged and assessed to and paid by the respective applicants. The costs, when finally determined, if in excess of the amount theretofore deposited shall be paid equally by the applicant or applicants. Any money remaining on deposit after final determination and payment of costs shall be refunded to the applicant or applicants equally. If, after a public hearing and from the evidence adduced therefrom, and from such engineering studies as the supervisor may have ordered made and which have been presented and considered at the hearing, the supervisor finds that repressuring operations of the pool or pools will tend to arrest or ameliorate subsidence, the supervisor shall by order adopt a fieldwide repressuring plan and specifications of the work to be done thereunder, if, in the judgment of the supervisor, the fieldwide plan and specifications are necessary, and will not substantially reduce the maximum economic quantity of oil or gas ultimately recoverable from the pool or pools under prudent and proper operations.

(c) Any fieldwide repressuring plan and general specifications shall be based upon a competent engineering study of all the pools in the field and shall provide for repressuring operations designed to most effectively arrest or ameliorate subsidence with respect to those land areas overlying or immediately adjacent to a producing pool or pools. The plan and specifications may provide that they may be carried out by one or more units made up of the

pool, groups of pools, or portions thereof, or by individual persons, or by cooperative agreements between two or more persons or by any combinations of the foregoing which in the judgment of the supervisor shall be feasible. The study may be reviewed from time to time by the supervisor, and if it be determined, from an analysis of the collected data, that consideration should be given to the alteration or modification of the plan and specifications, the supervisor shall order the holding of the requisite hearing for the purpose of determining whether the change should be incorporated into the plan and specifications by an amended order. The supervisor may amend a fieldwide repressuring plan and general specifications of the work to be done in the same manner as herein provided for the initial adoption of the plan and specifications.
(Amended by Stats. 1992, Ch. 999, Sec. 16. Effective January 1, 1993.)

§ 3319.1. Prior to the adoption of a fieldwide repressuring plan and general specifications of the work to be done thereunder, as provided in Section 3319, the supervisor, upon the application of any city, county, city and county, any part of which is in a subsidence area, or any contractor or lessee for the production of oil or gas therefor, or any person having a working interest therein, who has submitted therewith an engineering report and plan for pressure restoration or pressure maintenance of a particular pool or pools, or portion thereof underlying a certain described area or portion of such field, designed for the purpose of arresting or ameliorating subsidence therein, prepared by a petroleum engineer licensed by the State, shall hold a public hearing to consider the need for repressuring operations in such pool or pools, or portion thereof, in order to arrest or ameliorate subsidence. Applications relating generally to the same described area or portions of such field may be ordered consolidated by the supervisor for such public hearing thereon.

The procedure and method prescribed in Section 3319, with reference to the determination of amount, assessment, payment and refunding of costs, in conjunction with the holding of the hearing therein provided, are hereby incorporated with reference to the determination of amount, assessment, payment and refunding of costs as a condition precedent to the holding of the hearing herein provided.

If, after a public hearing and from the evidence adduced therefrom, and from such engineering studies as he may have ordered made and which have been presented and considered at such hearing, the supervisor finds that repressuring operations of such pool or pools or portions thereof will tend to arrest or ameliorate subsidence, he shall by order adopt a repressuring plan and specifications of the work to be done thereunder in such pool or pools or portions thereof, if in his judgment such plan and specifications are necessary and will not substantially reduce the maximum economic quantity of oil or gas ultimately recoverable from such pool or pools under prudent and proper operations.

Any such repressuring plan and specifications adopted in furtherance thereof shall be designed to most effectively arrest or ameliorate subsidence with respect to those affected land areas

overlying or immediately adjacent to such pool or pools, or portions thereof. The supervisor may amend such repressuring plan and specifications in the same manner as herein provided for the initial adoption of said repressuring plan and specifications.

Any order of the supervisor adopting a repressuring plan and specifications of the work to be done thereunder with respect to a particular pool, or pools, or portions thereof, shall be expressly conditioned so as to provide that such plan and specifications shall be subject to amendment or modification if, after the holding of a public hearing thereon, it be determined that such amendment or modification is necessary in order to conform such plan and specifications with the subsequently adopted fieldwide repressuring plan and general specifications as provided for in Section 3319.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3320. (a) The policy of conducting voluntary repressuring operations in a pool or pools, or portions thereof, in order to arrest or ameliorate subsidence, or for any other lawful purpose, whether individually or by unit or co-operative agreement, shall be encouraged by the supervisor. Nothing contained in this article shall be deemed to prohibit the supervisor from approving voluntary repressuring operations in any pool or pools, or part thereof, pursuant to this article or any other provision of Division 3 (commencing at Section 3000) of the Public Resources Code prior to adoption of a repressuring plan and specifications under Section 3319 or 3319.1, if in his judgment such repressuring operations are not detrimental to the intent and purposes of this article to arrest or ameliorate subsidence, or are not otherwise unlawful. At any time after the adoption of a repressuring plan and specifications therefor, as provided in Section 3319.1, or the adoption of the fieldwide repressuring plan and specifications therefor, as provided in Section 3319, and prior to the issuance of a unit order, the supervisor shall, upon request being made therefor, analyze any such currently conducted repressuring operations, and any proposed plan of repressuring operations to determine whether such operations are or would be in conformity, or could be made to conform, with either of the foregoing adopted repressuring plans and specifications. If the supervisor determines that such existing or proposed repressuring operations do conform, or if he determines that such operations can be made to conform, and the respective party or parties thereto agree to the recommended modifications, he shall approve such voluntary repressuring operations. Upon such approval by the supervisor, the party or parties thereto shall be entitled to continue or proceed with such repressuring operations without specific direction or order from the supervisor, except as provided in subdivision (c) hereof.

The provisions of Section 6879 shall apply to any such voluntary or co-operative agreement which includes tide and submerged lands of the State which have been granted to a city, county, city and county or district by a grant which does not except and reserve to the State all deposits of minerals, including oil and gas, in said lands.

(b) In the event any proposed plan of repressuring operations is not commenced or any proposed unit or co-operative agreement which has been approved by the supervisor, is not

executed and operations commenced thereunder by the respective parties thereto within the time specified in the order of the supervisor approving the same, or within any extension thereof granted by the supervisor, for good cause shown, but in no event longer than 90 days from the expiration date specified in the order of approval, the order of the supervisor shall be deemed automatically revoked, without further action, and the supervisor shall take such appropriate action as authorized by this article.

(c) The supervisor shall, at all times, have access to and may inspect all repressuring operations referred to in subdivision (a) hereof for the purpose of determining that performance is being conducted in accordance with the repressuring plan or plans and specifications of work to be done thereunder adopted pursuant to Section 3319 or 3319.1, or in accordance with the orders of the supervisor approving repressuring operations, and shall have power to require such operations to conform to the said repressuring plan or plans and specifications of work to be done thereunder adopted by, or orders theretofore made by the supervisor, and to otherwise enforce compliance with this article.

(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3320.1. (a) An agreement for the management, development and operation of two or more tracts in a pool or pools, or portions thereof, in a field as a unit without regard to separate ownerships for the
production of oil and gas, including repressuring operations therein, and for the allocation of benefits and costs on a basis set forth in the agreement, shall be valid and binding upon those who consent thereto and may be filed with the supervisor for approval.

Any agreement for the cooperative management, development and operation of two or more tracts in a pool or pools, or portions thereof, in a field for the production of oil or gas, including repressuring operations therein, shall be valid and binding upon those who consent thereto and may be filed with the supervisor for approval.

If in the judgment of the supervisor a unit agreement or cooperative agreement filed for approval is not detrimental to the intent and purposes of this article to arrest or ameliorate subsidence, or otherwise unlawful, the supervisor may approve the agreement. No such agreement approved by the supervisor hereunder or heretofore approved pursuant to applicable law prior to the enactment of this article shall be held to violate any of the statutes of this state prohibiting monopolies or acts, arrangements, agreements, contracts, combinations or conspiracies in restraint of trade or commerce.

(b) In the event that at the time of the approval by the supervisor of a unit or cooperative agreement under subdivision (a), the supervisor makes written findings of all of the following:

(1) A primary purpose of the unit or cooperative agreement is the initiation and conduct of repressuring operations in the area covered thereby for the purpose of arresting or ameliorating subsidence.

(2) The initiation and conduct of repressuring operations in the area covered by the unit or cooperative agreement are feasible and compatible with the purposes of this article.

(3) The persons who are entitled to 75 percent of the proceeds of production of oil and gas within the area covered by the unit or cooperative agreement (measured by the production of oil and gas therein in the last calendar year preceding the date of such approval) have become parties to such agreement by signing or ratifying it.

(4) It is necessary, in order to initiate and conduct repressuring operations, that the properties of nonconsenting persons who own working interests or royalty interests in lands within the area covered by the unit or cooperative agreement become subject to the agreement.

(5) The agreement is fair and reasonable, and contains appropriate provisions to protect and safeguard the rights of all persons having an interest in oil and gas production in the area covered thereby.

Then the supervisor shall make and enter an order which shall provide that unless the nonconsenting persons, within 30 days after service upon those persons of the order in the manner specified by the supervisor, become parties to the agreement by signing or ratifying the agreement, the right of eminent domain may be exercised as provided in subdivision (c) for the purpose of acquiring the properties of the nonconsenting persons which are found by the supervisor to be necessary for the initiation and conduct of the repressuring operations.

If the supervisor makes findings in accordance with the foregoing, the findings shall be prima facie evidence of all of the following:

(A) Of the public necessity of the development and operation of the properties in accordance with the unit or cooperative agreement and of the repressuring operations to be initiated and conducted pursuant to the agreement.

(B) That the acquisition of the properties of the nonconsenting persons which are designated by the supervisor is necessary therefor.

(C) That the repressuring and other operations to be initiated and conducted pursuant to the agreement, and the improvements to be made in connection therewith are planned or located in the manner which will be most compatible with the greatest public good and the least private injury.

The acquisition and use of land, including oil and gas rights therein, and personal property used in the production of oil and gas within a subsidence area for the purposes and by the persons mentioned in this section under the circumstances herein specified, are public uses on behalf of which the right of eminent domain may be exercised.

(c) Subject to the provisions of subdivision (b), the right of eminent domain for the purposes therein mentioned may be exercised by any city, county, or city and county, which has agreed to commit the properties to be acquired to such unit or cooperative agreement, or which has agreed to convey all or a portion of said properties upon acquisition, for a price not less than the cost of acquiring the same, to working interest owners who are parties to such unit or cooperative agreement and who have agreed to commit such properties to said agreement.

Except as otherwise provided in subdivisions (b) and (c), any condemnation action brought hereunder shall be governed by Title 7 (commencing with Section 1230. 010) of Part 3 of the Code of Civil Procedure.

If a condemnation action or actions to acquire the properties of the nonconsenting persons are promptly commenced and diligently prosecuted to final judgment by which the properties are acquired, no compulsory unit order affecting the area covered by the agreement shall be made by the supervisor under Section 3321 with respect to that area.
(Amended by Stats. 1984, Ch. 193, Sec. 100.)

§ 3320.2. If the supervisor determines that sufficient of the working interest owners and royalty interest owners to make repressuring operations feasible in any pool or pools, or portions thereof, for which a repressuring plan and specifications have been adopted by the supervisor, have not prior thereto, or within the time designated in the order of the supervisor adopting such plan and specifications, entered into a unit agreement or co-operative agreement, or have not taken individual action under which the repressuring operations contemplated by such plan will be satisfactorily initiated and conducted, the supervisor shall have power to compel the unitization of all interests in such pool or pools, or portions thereof, in the manner and subject to the limitations set forth in this article.

If the supervisor shall compel the unitization of the interests in any pool or pools, or portions thereof, in a field as provided in Section 3321, the supervisor shall have power to order repressuring operations to be initiated and conducted in the unit area in accordance with the applicable repressuring plan and specifications previously adopted by the supervisor; provided, however, that no order compelling unitization or order requiring the initiation and conduct of repressuring operations in the unit area shall be made unless the supervisor shall find:

(1) That the initiation and conduct of such repressuring operations will not substantially reduce the maximum economic quantity of oil or gas ultimately recoverable from the unit area as a whole under prudent and proper operations.

(2) That the estimated cost of initiating and carrying out such repressuring operations within the unit area as a whole, including both capital and operating costs, will not exceed the estimated value of the increased production resulting therefrom.

The supervisor shall have continuing jurisdiction to review the results of repressuring operations previously ordered by the supervisor and to make such further orders as may be necessary or desirable under the provisions of this article.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3320.3. In determining, as required by Section 3320.2, whether the estimated cost of initiating and conducting such repressuring operations will exceed the estimated value of the increased production resulting from such operations, the supervisor shall exclude from consideration that portion of the cost of initiating and conducting such repressuring operations which any interested person or persons agree to bear, in addition to the portion of the cost of such operations which such person or persons would otherwise be obligated to bear pursuant to the provisions of subdivision (e) of Section 3322 under arrangements for the conditional repayment of such excess portion from increased production as follows:

(a) Each person bearing a part of such excess portion of the cost of initiating and conducting such repressuring operations shall recover the amount so borne, plus interest on the unpaid balance thereof at the rate of 31/2 percent per annum compounded semiannually by receiving, until fully repaid, his pro rata share, based upon his proportionate contribution from an amount not less than 60 percent or more than 90 percent, which, in the judgment of the supervisor, shall from time to time be determined to be fair and reasonable to all persons concerned, of that proportion of the increased production thereafter produced that the said excess portion of the cost of initiating and conducting such repressuring operations bears to the total cost of initiating and conducting such repressuring operations.

(b) If the supervisor shall find the offer of such person or persons to bear the excess portion of the cost of initiating and conducting such repressuring operations to be feasible, fair and reasonable, any order for repressuring operations made by the supervisor, in addition to its other provisions, shall set forth the time, manner and terms upon which such excess portion of the cost of initiating and conducting repressuring operations shall be borne by such person or persons until repaid to such person or persons from increased production as above provided.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3320.4. In order to encourage the initiation and conduct of repressuring operations with the greatest possible speed in a subsidence area, the State, or any city, or county, city and county, or other political subdivision, deriving revenues from oil or gas produced from tide or submerged lands may expend such revenues for the purpose of bearing that portion of the cost of initiating and conducting repressuring operations in such subsidence area:

(1) In excess of that share of such costs which would otherwise be borne by such person pursuant to subdivision (e) of Section 3322 as a participant in a unit created by order of the supervisor pursuant to Section 3322 under arrangements for conditional repayment as above provided, or

(2) In excess of that share of such costs which would otherwise be borne by such person as a participant in a unit under a unit agreement voluntarily entered into under arrangements for conditional repayment satisfactory to such person and the other working interest owners interested in said unit.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3320.5. No working or royalty interest owner shall be liable for any loss or damage resulting from repressuring or other operations connected with the production of oil and gas which are conducted, without negligence, pursuant to and in accordance with a co-operative or unit agreement ordered or approved by the supervisor pursuant to this article.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3321. (a) Subject to the limitations specified in this article, the supervisor shall have the power to issue a compulsory unit order upon the petition of a city, county, city and county, any part of which is in a subsidence area, or any contractor or lessee for the production of oil or gas therefor, or any person or persons owning working interests in the area affected by such order.

The supervisor shall, prior to the issuance of each compulsory unit order, schedule a public hearing thereon. Such hearing may embrace all or a portion of those land areas, and the pool or pools, or portions thereof, underlying such areas, which have been theretofore included in one of the repressuring plans referred to in Section 3319 or 3319.1, except those areas, and the pool or pools, or portions lying thereunder, which are currently devoted to repressuring operations pursuant to an approved repressuring plan in accordance with the procedure prescribed in subdivision (a) of Section 3320. Such hearing shall be set not later than 60 days from the date of the filing of such petition.

(b) If, after such public hearing and from the evidence adduced therefrom, and from such engineering studies as he may have ordered made and which have been presented and considered at such hearing, or at any prior hearing held for the purpose of considering a repressuring plan, the supervisor finds:

1. That repressuring operations of such pool or pools, or portions thereof, will tend to arrest or ameliorate subsidence; and

2. That compulsory repressuring operations are required by reason of the failure, refusal or inability of the respective parties within the affected area to agree upon and initiate approved repressuring operations; and

3. That subsidence of land overlying or immediately adjacent to such pool or pools is injuring or imperiling valuable buildings, or other improvements, or harbor installations or is interfering with commerce, navigation and fishery, or substantial portions of such lands may be inundated if subsidence continues, thereby endangering life, health, safety, peace, welfare and property; and

4. That unit operation of such pool or pools, or portions thereof, is reasonably necessary to carry out repressuring operations in accordance with the theretofore adopted pressuring plan; and

5. That the creation of the unit is feasible, necessary and justifiable under all conditions affecting the unit at the time of its creation or which can be reasonably anticipated by the supervisor at such time; then the supervisor shall issue an order requiring unit operation of such pool or pools, or portions thereof, on such terms and conditions as may be determined from the evidence to be fair, reasonable, equitable and in conformance with said repressuring plan.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3322. An order of the supervisor requiring unit operation, pursuant to Section 3321, may include lands owned by any person as defined in Section 3316.1, and shall contain such provisions as may be necessary or proper to protect, safeguard, and adjust the respective rights and obligations of the persons affected, including but not limited to lessees, operators, independent contractors, lien claimants, owners of mineral rights, royalties, working interests, production payments, mortgages, or deeds of trust. The order shall include:

(a) A description of the area embraced, termed the “unit area”;

(b) A general statement of the nature of the applicable repressuring plan and the specifications therefor adopted by the supervisor to arrest or ameliorate subsidence to be prescribed in a separate order of the supervisor requiring repressuring operations;

(c) That as a condition to the continued production by the owners or operators of oil or gas from such pool or pools, they shall initiate and conduct such repressuring operations as shall be prescribed in a separate order or orders of the supervisor;

(d) A formula for the apportionment and allocation of the unit production among and to the several separately owned tracts within the unit area such as reasonably will permit persons otherwise entitled to share in or benefit by the production from such separately owned tracts to produce or receive, in lieu thereof, their fair, equitable and reasonable share of the unit production or other benefits thereof. A separately owned tract's fair, equitable, and reasonable share of the unit production shall be measured by the value of each such tract for oil and gas purposes and its contributing value to the unit in relation to like values of other tracts in the unit, taking into account acreage, the quantity and quality of oil and gas recoverable therefrom, location on structure, its probable productivity of oil and gas in the absence of unit operations, the burden of operation to which the tract will or is likely to be subjected, or so many of such factors, and such other pertinent engineering geological, or operating factors as may be reasonably susceptible of determination;

Pending the adoption of a final formula for apportionment and allocation of unit production as above provided (which final formula must be adopted not later than 18 months from the effective date of the order of the supervisor requiring unit operation), an interim formula may be adopted based upon the gross oil production in the unit area during the calendar year preceding the date of such order of the supervisor, which shall be effective until the adoption of the final formula as above provided. The final formula, when adopted, shall be retroactive to the effective date of the order requiring unit operation and adjustment shall be made in the apportionment and allocation of production during such interim period in accordance with the final formula so adopted.

(e) Provisions for financing the unit and the further development and operation of the unit area and the basis, terms, and conditions on which the cost and expense thereof shall be apportioned among and assessed against the tracts and all interests therein, including a detailed accounting procedure governing all charges and credits incident to all operations within the unit. The expense of unit operation shall be chargeable to the separately owned tracts in the same proportion that such tracts share in the unit production, and the expenses chargeable to a tract shall be paid by the person who in the absence of unit operation would be responsible for the expense of developing and operating such tract. Subject to such terms and conditions as to time and rate of interest as may be fair to all concerned, reasonable provisions shall be made in the order for carrying or otherwise financing persons who are unable promptly to meet their financial obligations in connection with the unit repressuring operations, and upon application made prior to the entry of the order, for carrying a nonassenting working interest owner affected by a final order of the supervisor under Section 3321;

(f) A provision for the credits and charges to be made in the adjustment among the owners or operators of tracts within the unit area for their respective investments in wells, tanks, pumps, machinery, materials, and equipment contributed to the unit operation by the respective owners or operators. The net amount chargeable against the owner or operator of a separately owned tract shall be considered expenses of unit operation chargeable against such tract;

(g) A provision appointing an operating committee to have general overall management and control of the unit, including voting procedures, the conduct of its business and affairs and the operations to be carried on by it for the primary purpose of ameliorating or arresting subsidence, subject to the applicable repressuring plan, the specifications therefor and the unit order adopted by the supervisor. Such operating committee shall be composed of the persons primarily liable for the payment of the expenses of unit operation, or their representatives, which committee shall, within the time specified in the order, appoint a person to be known as the “unit operator,” who shall, under the direction and supervision of the operating committee, be responsible for the management and conduct of the unit operation;

(h) A provision specifying the method of voting upon any motion before the operating committee and the majority in number of votes necessary in order to carry a motion;

(i) That each vote upon a motion by the operating committee shall have a value corresponding to the percentage of the expense of unit operation borne by the person voting or his principal pursuant to the provisions of subdivision (e) of this section;

(j) If the operating committee fails to appoint the unit operator within the time specified in an order issued pursuant to this article, the supervisor shall appoint the unit operator;

(k) The time the unit operation shall commence, and the manner in which and the circumstances under which the unit operation shall terminate;

(l) Such additional provisions not inconsistent with this article which the supervisor deems appropriate for the accomplishment of the proposed plan of repressuring operations for the purpose of arresting or ameliorating subsidence within the unit area and the protection of all interested parties.

(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3322.1. No order of the supervisor creating a unit and prescribing the plan of unitization applicable thereto shall become effective unless and until the plan of unitization has been signed, or in writing ratified or approved, by working interest owners who are entitled to 65 percent of the proceeds of production of oil and gas, prior to the payment of royalties, within the proposed unit area, measured by the production from such area in the calendar year preceding the date of the order of the supervisor creating such unit, and the supervisor has made a finding either in the order creating the unit or in a supplemental order that the plan of unitization has been so signed, ratified or approved by persons owning the required percentage interest in and to the unit area. Where the plan of unitization has not been so signed, ratified or approved by persons owning the required percentage interest in and to the unit area at the time the order creating the unit is made, the supervisor shall, upon petition and notice, hold such additional and supplemental hearings as may be requested or required to determine if and when the plan of unitization has been so signed, ratified or approved by persons owning the required percentage interest in and to such unit area and shall, in respect to such hearings, make and enter a finding of his determination in such regard. In the event persons owning the required percentage interest in and to the unit area have not so signed, ratified or approved the plan of unitization within a period of six months from and after the date on which the order creating the

unit is made, the order creating the unit shall cease to be of further force and effect and shall be revoked by the supervisor.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3323. Notice of the time and place of any hearing to be held by the supervisor shall be given by publication in a newspaper of general circulation printed and published in the county in which the subsidence is alleged to be taking place, and notice thereof sent, in the manner prescribed by Section 3303 to the persons mentioned in such section within the area which will be the subject of his order.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3324. At hearings all persons interested are entitled to be heard and present evidence, both oral and written. All such persons shall be sworn, and a transcript of the proceedings shall be kept. The procedure to be followed by the supervisor with respect to the administering of oaths, applying for subpoenas for witnesses and for the production of books, records, well logs, production records, and other documents, the taking of depositions, and the penalties attaching for failure to comply with any order of the supervisor or subpoena issued, shall be in the manner as in this division provided. On the request of the supervisor, a hearing officer in the Office of Administrative Hearings may be assigned to assist in conducting the proceedings as provided in Section 11370.3 of the Government Code. The officer, however, shall not make the determination specified in Section 3321.

The provisions of Section 3234 prohibiting the giving of testimony as to the contents of records on file shall not apply to this article. All of these records shall be available and may be received in evidence in any public hearing or in any judicial proceeding herein provided for.
(Amended by Stats. 2004, Ch. 183, Sec. 288. Effective January 1, 2005.)

§ 3325. The supervisor shall make and enforce all rules and regulations necessary or proper to accomplish the purposes of this article or to administer or enforce any order issued pursuant thereto. Such
rules and regulations shall be adopted in accordance with the provisions of Chapter 4 (commencing at Sec*tion 11370), Part 1, Division 3, Title 2 of the Government Code.*
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3326. An order requiring unit operation may be amended for good cause by a subsequent order entered by the supervisor, except that no such order or amendment shall change the percentage of oil and gas allocated to a separately owned tract by the original order except with the consent of all persons who might be adversely affected thereby. Before issuing any such order, he shall make similar findings as are required for an original order, and such new order shall be subject to the same requirements and restrictions that are applicable to an original order. The provisions of this section shall not prohibit the establishment of an interim formula for the apportionment and allocation of unit production pursuant to subdivision (d) of Section 3322.

(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3327. Subject to the limitations in this article governing the creation of the unit previously established, the supervisor, by entry of a new order after a public hearing, may require unit operation in a pool, or a portion thereof, which embraces a unit area established by a previous order. Such new order, in providing for allocation of unit production from the enlarged unit area, shall first treat the unit area previously established as a single tract, and the portion of unit production so allocated thereto shall then be allocated among the separately owned tracts included in such previously established unit area in the same proportions as those specified therefor in the previous order.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3328. (a) The portion of unit production allocated to a separately owned tract shall be deemed, for all purposes, to have been actually produced from such tract, and operations conducted pursuant to the order of the supervisor shall be deemed for all purposes, to be the conduct of operations for the production of oil and gas from each separately owned tract in the unit area in the fulfillment of all the express or implied obligations, trust or otherwise, of the owner or any person interested in such tract under a lease, or any contract, or any trust or trust obligations applicable to such tract, insofar as they relate to the pool, or pools, or portions thereof, covered by such order.

(b) Such unit production shall be distributed among or the proceeds thereof paid to the several persons entitled to share in the production from such separately owned tract in the same manner, in the same proportions, and upon the same conditions that they would have participated and shared in the production or proceeds thereof from such separately owned tract had not said unit been organized. The share of the unit production allocated to each separately owned tract shall be delivered in kind to the persons entitled thereto by virtue of ownership of oil and gas rights therein or by purchase from such owners, subject to the right of the unit operator to a lien thereon for payment of unit expenses pursuant to the order of unitization.

(c) Operations carried on under and in accordance with the order of unitization shall be regarded and considered as a fulfillment of and compliance with all of the provisions, covenants, and conditions, express or implied, of the several oil and gas leases, contracts, other agreements or trusts pertaining to the development of lands included within the unit area. Wells drilled or operated on any part of the unit area no matter where located shall, for all purposes, be regarded as wells drilled on each separately owned tract within such unit area.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3329. The unit operator shall be authorized on behalf of and for the account of all the respective owners or possessors of the mineral rights within the unit area to supervise, manage and conduct the further development and operations for the production of oil, gas and other hydrocarbon substances from the unit area pursuant to the powers conferred, and subject to the limitations imposed by the provisions of this article and by the order of unitization.

The obligation or liability of the lessee or other owners of the mineral rights in the several separately owned tracts for the payment of unit expense shall at all times be several and not joint or collective and in no event shall a lessee or other owner of the mineral rights in the separately owned tract be chargeable with, be obligated or liable, directly or indirectly, for more than the amount apportioned, assessed or otherwise charged to his interest in such separately owned tract pursuant to the order of unitization and then only to the extent of the lien provided for in this section.

Subject to the provisions in the order of unitization, the unit operator shall have a lien upon all drilling and production equipment in and to each separately owned tract, and upon the portion of the unit production allocated to the working interest therein, to secure the payment of the amount of the unit expense chargeable to and assessed against such separately owned tract. Such lien may be enforced by the unit operator, as the agent of the respective owners or possessors of the mineral rights within the unit area, as against noncarried working interest owners, in the manner set forth in Section 3330. The interest of the lessee or other person who by lease, contract or otherwise is obligated or responsible for the costs and expenses of developing and operating a separately owned tract for the production of oil, gas and other hydrocarbon substances in the absence of unitization shall be solely responsible for and chargeable with any assessment for unit expense made against such tract.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3330. When unit expenses incurred by a unit operator on behalf of the unit have not been paid, the unit operator may, in order to secure payment of the amount due the unit operator, fix a lien upon the interest of the debtor in all drilling and production equipment of the debtor on the premises and upon his allocated portion of the unit production as and when produced from the unit area, by filing for record, with the recorder of the county where the property or a portion thereof involved is located, an affidavit setting forth (1) in general terms the kind of materials, tools, equipment or supplies furnished, labor or services performed, or expenditure incurred, and (2) a description of the land involved, the name of the debtor and his interest in the production from the unit area, and (3) the amount which is still due and unpaid, and (4) a statement that at least 20 days prior to the date of the affidavit the unit operator gave written notice to the debtor by registered mail at his last known address, setting forth the information required under subdivisions (1), (2) and (3) above. Any such affidavit shall be filed for record not later than 90 days after the delivery of the property or the completion of the labor or the incurring of the expenditure. The lien shall not be construed as constituting a lien upon real property as such, except as to the recoverable oil and gas lying thereunder, but otherwise shall be of the same nature and subject to foreclosure in the same manner and within the same time as mechanics' liens. In any case where a unit operator is in possession of the production which is subject to the lien, he may sell such production or so much thereof as may be necessary to satisfy said lien; provided, that he shall hold or arrange for the holding of the proceeds of such sale for appropriate distribution upon the determination of the controversy.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3331. Any order issued by the supervisor pursuant to this article, from its effective date, shall be binding upon each person owning or claiming any legal or equitable interest in the area which is the subject of such order or in the oil and gas produced or to be produced therefrom or a right to participate in a share of the proceeds thereof. From the effective date of such an order it shall be unlawful for a person to drill, redrill, operate, work on or produce any well within such area otherwise than in conformity with the order.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3332. Within 30 days after the written notice of the entry of a final order of the supervisor, or within such further time as the supervisor may grant for good cause shown, but in no event shall such time be extended more than 60 days from the written notice of entry of such final order, any person affected thereby may file with the supervisor an application for a rehearing in respect to any matter determined by such order, setting forth the particulars in which such order is considered to be objectionable. The supervisor shall grant or deny any such application in whole or in part within 30 days from the date of the filing thereof, and failure to act thereon within such period shall constitute a denial of such application. In the event that a rehearing is granted, notice to such effect shall be given to all persons affected by such order, advising them of the date of such rehearing and of their right to appear and be heard thereon. The date set for any such rehearing shall be not less than 30 days nor more than 60 days from the date the application for rehearing is granted, unless, upon good cause shown, the time is extended by the supervisor, but in no event shall such time be extended more than 90 days from the date such application for rehearing is granted. The supervisor may enter an amended order or a new order after the rehearing as may be required under the circumstances. The provision of Article 6 (commencing with Section 3350) of Chapter 1 of Division 3 relating to appeals and review shall not apply to this article.
(Amended by Stats. 1974, Ch. 765.)

§ 3333. (a) A final order of the supervisor shall be subject to judicial review by filing a petition for a writ of mandate in accordance with the provisions of Chapter 2 (commencing at Section 1084) of Title 1 of
Part 3 of the Code of Civil Procedure in the superior court of any county in which all or any part of the area affected is located, except that any such proceedings shall be instituted within 30 days from the date that a certified copy of the transcript of the proceedings before the supervisor has been delivered to the applicant; otherwise, the findings and determination of the supervisor shall be deemed final and conclusive. Any action so filed shall incorporate therein a certified copy of the transcript of the proceedings before the supervisor.

(b) Notice of intention to petition the superior court for judicial review shall be filed by the applicant or applicants with the supervisor within 60 days after the entry of the final order complained of or within 60 days following the final disposition of any application for rehearing. The notice must identify the order and state the grounds of objection thereto. Immediately upon the filing of such notice the supervisor shall certify to the applicant or applicants the estimated

cost of preparing the transcript of the proceedings before the supervisor. The amount of the estimated cost shall be deposited with the supervisor within 10 days after the mailing of the certification of such cost to the applicant or applicants. Upon the deposit of the cost the supervisor shall order the preparation of the transcript. A certified copy of the transcript shall be delivered to the applicant or applicants within 60 days from the date of the filing of said notice of intention unless such time is extended for good cause by the supervisor, but in no event later than 90 days from the date of filing of such notice.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3334. The pendency of actions before the superior court or proceedings for review before any other court of competent jurisdiction of itself shall not stay or suspend the operation of any order; however, the superior court or such other court in its discretion, upon its own motion or upon proper application of any party thereto, may, for good cause, stay or suspend, in whole or in part, the operation of any order pending consideration or review thereof.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3335. If an action for judicial review has not been commenced within the time prescribed for such action, or, if filed, the time within which to process an appeal by the petitioner from any judgment or order rendered therein has expired, or if such an appeal has been timely perfected and there has been an affirmance of such judgment or order, the supervisor may order that the production by noncomplying owners or operators of oil or gas from any pool or pools or portions thereof cease or be curtailed until such noncomplying owners or operators comply with said unit order.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3336. The supervisor upon his own motion may, or shall upon the application of any interested person, hold a public hearing for the purpose of determining and establishing the exterior boundaries encompassing the lands referred to in Section 3317. If, after a public hearing and from the evidence adduced therefrom, the supervisor determines that the lands, or a portion thereof, come within the category of those lands referred to in Section 3317, he shall adopt an order fixing and establishing the exterior boundaries thereof. The supervisor shall retain jurisdiction in this regard, and shall, if it be made to appear necessary, hold further hearings for the purpose of determining whether the boundaries previously established should be enlarged or otherwise altered. Any such change or alteration in said boundaries shall be made by order of the supervisor.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3337. The division shall exercise surveillance over all repressuring operations in the state.
(Repealed and added by Stats. 1975, Ch. 1049.)

§ 3341. At the termination of oil and gas production from a unit area established or approved pursuant to this article and the abandonment of attempts to obtain production therefrom, any

interested municipal corporation or other public agency may acquire by eminent domain, in the manner provided by law for the condemnation of property for public use by the state, municipal corporation or other public agency, such oil production properties or facilities within the unit area as such municipal corporation or other public agency may deem necessary or essential to the maintenance of such pressures as will continue to arrest or ameliorate subsidence.
(Amended by Stats. 1975, Ch. 1240.)

§ 3342. To the extent necessary to conform to the provisions and requirements of this article, and to any order of unitization or other order, rule or regulation of the supervisor, made and adopted pursuant hereto, all leases, contracts, and all other rights and obligations shall be regarded as modified and amended, but otherwise to remain in full force and effect. Nothing contained in this article shall be construed to extend the term of any lease or other agreement.

Nothing contained in this article shall be construed to require a transfer to or vesting in the unit operator, or in persons other than those owning the same at the time of the creation of the unit, of title to the separately owned tracts or to any leases or other drilling and operating agreements thereon within the unit area, other than the right to use and operate the same to the extent set out in the order of unitization; nor shall the unit operator or the working interest owners jointly be regarded as owning the unit production. Each respective share of the unit production and the proceeds from the sale thereof shall be severally owned by the persons to whom the same is allocated pursuant to the order of unitization. All property, whether real or personal, which the unit operator may in any way acquire, hold or possess, the cost of which is chargeable to the working interest owners, shall not be acquired, held or possessed for the unit operator for his own account but shall be so acquired, held and possessed by the unit operator for the account of and as agent for each of the several working interest owners and shall be the property of each of such persons as their respective interests may appear under the order of unitization, subject, however, to the right of the unit operator to the possession, management, use or disposal of the same in the proper conduct of the affairs of the unit, and subject to any lien the unit operator may have thereon to secure the payment of unit expense.
No unit order made by the supervisor shall be construed to have the effect of, result in, or in any manner require or provide for the alienation, transfer, conveyance or change of any title or ownership, whether legal or equitable, of any person in or to any separately owned tract of land included in the said order, or to the mineral rights therein, to any other person owning or possessing a separately owned tract of land which may likewise be included in said unit order.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3343. (a) Any person who willfully violates any provision of this article or any rule, regulation or order of the supervisor, shall be subject to a penalty of one thousand dollars ($1,000) for each act of violation and for each day that the violation continues.

(b) The penalty provided in this section shall be recoverable by suit filed by the Attorney General in the name and on behalf of the supervisor in the superior court of the State of California for the county in which the defendant resides, or in which any defendant resides, if

there is more than one defendant, or in the superior court of any county in which the violation occurred. The payment of the penalty shall not operate to relieve a person on whom the penalty is imposed from liability to any other person for damages arising out of the violation. The penalty, when recovered, shall be paid to the State Treasurer and shall be deposited to the credit of the Oil, Gas, and Geothermal Administrative Fund.

(c) Any person knowingly aiding or abetting any other person in the violation of any provision of this article, or any rule, regulation or order of the supervisor shall be subject to the same penalty as that prescribed by this section for the violation by the other person.
(Amended by Stats. 2003, Ch. 240, Sec. 14. Effective August 13, 2003.)

§ 3344. (a) Whenever it appears that any person is violating or threatening to violate any provision of this article, or any rule, regulation or order of the supervisor, the supervisor may bring suit against the
person in the superior court of any county where the violation occurs or is threatened, to restrain the person from continuing the violation or from carrying out the threat of violation. Upon the filing of the suit, summons issued to the person may be directed to the sheriff or his or her deputies. In the suit, the court has jurisdiction to grant to the supervisor such prohibitory and mandatory injunctions either preliminary or final as the facts may warrant.

(b) If the supervisor fails to bring suit to enjoin a violation or threatened violation of any provision of this article, or any rule, regulation or order of the supervisor within 10 days after receipt of written request to do so by any person who is or will be adversely affected by the violation, the person making the request may bring suit in the person's own behalf to restrain the violation or threatened violation in any court in which the supervisor might have brought suit. If in the suit, the court should hold that injunctive relief should be granted, then the supervisor shall be made a party and shall be substituted for the person who brought the suit, and the injunction shall be issued as if the supervisor had at all times been the plaintiff.

(c) No civil action for damages shall lie against any person for the violation of this article or any rule, regulation or order of the supervisor, except against an owner of the working interest, and particularly no such suit or action shall lie against any lessor, royalty owner, contractor or purchaser of the oil and gas, and no such suit or action shall lie against an owner of the working interest, except suits or actions for damages occurring subsequent to the entry of an order or decision of the supervisor which result from a failure to comply with the order or decision.

(d) If the supervisor brings a suit or action pursuant to this article, no defendant or intervenor shall be permitted to cross-complain or otherwise bring an action in the same proceeding against any other person for damages or for any other purpose.
(Amended by Stats. 1982, Ch. 517, Sec. 350.)

§ 3345. No finding or determination made by the supervisor under the provisions of this article or by any court in proceedings involving the enforcement or review of the orders of the supervisor shall be received in evidence or be binding upon any person in any other proceeding not directly related to the making, enforcement or review of the orders of the supervisor under this article.

(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3346. The provisions of this article shall supersede any conflicting provisions contained in any legislative grant of tide and submerged lands, or in any law amendatory or supplemental thereto, or any
other laws affecting such granted lands.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

§ 3347. If any section, subsection, subdivision, sentence or clause of this article is adjudged to be unconstitutional or invalid, such adjudication shall not affect the validity of the remaining portion of this article. It is hereby declared that this article would have been passed, and each division, section, subsection, subdivision, sentence or clause thereof, irrespective of the fact that any one or more sections, subsections, subdivisions, sentences or clauses might be adjudged to be unconstitutional, or for any other reason invalid.
(Added by Stats. 1958, 1st Ex. Sess., Ch. 73.)

Article 6. Appeals and Review

§ 3350. (a) The operator of a well or a production facility to whom the supervisor or district deputy has issued an order pusuant to this chapter may file a notice of appeal from that order. The notice of appeal shall be in writing and shall be filed with the director. The operator shall file the appeal within 10 days of the service of the order, or within 10 days of the posting of a copy of an order made pursuant to Section 3308. Failure of the operator to file an appeal from the order within the 10-day period shall be a waiver by the operator of its rights to challenge the order. If the order, other than an order made pursuant to Section 3308, is served by mail, the time for responding shall be determined as provided in Section 1013 of the Code of Civil Procedure.

(b) (1) The filing of a written notice of appeal shall operate as a stay of the order, except when an order is issued as an emergency order pursuant to Section 3226. If the order is an emergency order, the operator shall immediately perform whatever work is required by the order to alleviate the emergency or shall permit the agents appointed by the supervisor to perform that work. If the order is an emergency order to cease injection, then the operator shall cease injection as soon as it is safe to do so.

(2) If an emergency order is set aside or modified on appeal, the supervisor shall refund the reasonable costs incurred by the operator for whatever work is not required by the set-aside or modified order or shall not impose costs for work performed by the supervisor or the supervisor's agents if the work is excluded from the modified order or the order is set aside. Only the costs of work performed shall be refunded, and there shall be no reimbursement for lost profits or increased production costs.

(3) (A) The costs to be refunded pursuant to paragraph (2) by the supervisor shall be determined in a hearing before the director after the exhaustion of appeals. The operator shall have the burden of proving the amount of costs to be refunded.

(B) A determination by the director as to the amount of costs to be refunded pursuant to paragraph (2) may be appealed by the operator pursuant to subdivision (a) of Section 3354.

(4) If the operator believes that it will be irretrievably injured by the performance of the work required to alleviate the emergency pending the outcome of the appeal, the operator may seek an order from the appropriate superior court restraining the enforcement of the order pending the outcome of the appeal.

(Amended by Stats. 2016, Ch. 274, Sec. 4. Effective January 1, 2017.)

§ 3351. (a) A hearing shall be provided in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code only in an appeal from an order in the following circumstances:

(1) Issued pursuant to a Section 3237 finding that the operator's wells are deserted and should be plugged and abandoned.

(2) Imposing civil penalties totaling more than twenty-five thousand dollars ($25,000).

(3) Rescinding an entire injection project approval for a project that has already commenced.

(4) Imposing a life-of-well bond or a life-of-production facility bond.

(b) An order issued pursuant to Section 3225 shall satisfy the substantive requirements of an accusation pursuant to Section 11503 of the Government Code and may be filed when scheduling a formal hearing in accordance with this chapter and Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code. All applicable formal hearing deadlines do not commence until a formal hearing is scheduled. When scheduling a formal hearing after an appeal from an order under this chapter, the supervisor is not required to send a Notice of Defense statement and the operator is not required to request a hearing.

(c) For an appeal of an order that is not described in subdivision (a), a hearing shall be conducted by the director in accordance with Sections 3352 and 3353.

(d) For an appeal of an order that is described in subdivision (a) and is also an emergency order, a hearing shall be conducted by the director in accordance with Sections 3352 and 3353 for the limited purpose of considering the reasonableness of the supervisor's determination that an emergency exists. All other penalties and requirements imposed by the order shall be considered at a hearing provided in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

(Amended by Stats. 2016, Ch. 274, Sec. 5. Effective January 1, 2017.)

§ 3352. (a) A hearing conducted by the director shall adhere to the following:

1) When an order is not issued as an emergency order, within 30 days from the date of the service of the notice of appeal, the director shall provide to the operator notice of the time and place of the hearing. The hearing shall take place within 30 days after the date of the director's notice. The notice shall inform the operator that the director may extend the date of

the hearing for up to 60 days for good cause upon his or her own motion, or an application of the operator or the supervisor.

(2) When an order has been issued as an emergency order, within 10 days from the date of the service of the notice of appeal, the director shall provide to the operator notice of the time and place of the hearing. The hearing shall take place within 20 days after the date of the director's notice. The notice shall inform the operator that the director may extend the date of the hearing for up to 30 days for good cause upon his or her own motion, or an application of the operator or the supervisor.

(b) The director shall conduct the hearing within the district where the majority of the wells or production facilities that are the subject of the order are located, or the hearing may be conducted at a location outside of that district upon application of the operator. The hearing shall be reported by a stenographic reporter.

(c) The notice of hearing shall inform the operator of its right to file a written answer to the charges no later than 10 days before the date of the hearing. The notice also shall inform the operator that it has the right to present oral and documentary evidence at the hearing.

(d) Upon a verified and timely petition of the operator, the director may order the testimony of a witness at the hearing. The petition shall be served upon the director and the other party within five days after the filing of an appeal and shall set forth the name and address of the witness whose testimony is requested, to the extent known; a showing of the materiality of the testimony; and a showing that the witness cannot be compelled to testify absent an order of the director. The supervisor may file an opposition to the petition within five days after the petition is served. The director shall either deny or grant the petition within 10 days after receipt of the petition. Upon granting a petition, the director shall issue a subpoena pursuant to Section 3357 compelling the testimony of the witness at the hearing. Obtaining subpoenas may be considered good cause to extend the date of the hearing under paragraph (1) or (2) of subdivision (a).

(e) The director may convert a hearing pursuant to this section to a formal hearing conducted in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code in any of the following circumstances:

(1) The operator makes a showing satisfactory to the director that the order being appealed is likely to result in termination of an established oil or gas producing or injection operation.

(2) It appears to the director that the hearing will involve complex evidentiary or procedural issues that will cause more than minimal delay or burdens.

(3) The operator and the supervisor agree and stipulate to convert the hearing to a formal hearing.

(f) The conversion of a hearing pursuant to this section to a formal hearing shall be conducted in accordance with Article 15 (commencing with Section 11470.10) of Chapter 4.5 of Part 1 of Division 3 of Title 2 of the Government Code. If a hearing for an appeal of an emergency order is converted to a formal hearing, the supervisor shall endeavor to schedule and notice a formal emergency hearing as soon as reasonably possible and, notwithstanding Section 11517 of the Government Code, the director shall only have 30 days from receipt of the administrative law judge's proposed emergency hearing decision to act as prescribed in

subparagraphs (A) to (E), inclusive, of paragraph (2) of subdivision (c) of Section 11517 of the Government Code.

(g) The director or his or her designee shall permit inconspicuous personal recording devices to be used by persons during a hearing pursuant to this section to make sound recordings as personal notes of the proceedings. A person proposing to use a recording device shall provide advance notice to the director or his or her designee. The recordings may not be used for any purpose other than as personal notes.
(Amended by Stats. 2016, Ch. 274, Sec. 6. Effective January 1, 2017.)

§ 3353. (a) Within 30 days after the close of a hearing conducted by the director, the director shall issue a written decision affirming, setting aside, or modifying the order from which the appeal was taken. The director's written decision shall be based upon the preponderance of the evidence and shall set forth the director's factual findings, legal conclusions, and rationale for the result. The director may extend the 30-day period for issuing the written decision if the extension is agreed to by the operator.

(b) The director shall file the written decision with the supervisor and serve it on the operator as soon as the decision is complete, at which time the decision shall be deemed final. The director's decision shall supersede the order of the supervisor from which the appeal was made. If the director affirms or modifies the order, the director shall retain jurisdiction until the operator completes the work required to be performed by the order.
(Repealed and added by Stats. 2010, Ch. 264, Sec. 10. Effective January 1, 2011.)

§ 3354. (a) Following a hearing conducted by the director pursuant to Sections 3352 and 3353 or subdivision (b) of Section 3350, the operator may obtain judicial review of the decision of the director by filing a petition for writ of administrative mandamus in the superior court of the county where the division's district office from which the order was issued is located. The operator shall file the petition within 30 days after the date the operator was served with the decision.

(b) Following a hearing conducted in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code, the operator may obtain judicial review of the decision pursuant to Section 11523 of the Government Code.
(Repealed and added by Stats. 2010, Ch. 264, Sec. 12. Effective January 1, 2011.)

§ 3355. When an operator seeks judicial review of a decision of the director, including a decision following a hearing conducted in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code, the court shall hear the cause on the record before the director or an administrative law judge. New or additional evidence shall not be introduced in court. The court's inquiry shall extend to whether the director acted without or in excess of jurisdiction, whether there was a fair hearing, and whether there is any prejudicial abuse of discretion. Abuse of discretion is established if the administrative proceeding has not been conducted in the manner required by law, the decision is not supported by the findings, or the findings are not supported by substantial evidence in light of the whole record.

(Repealed and added by Stats. 2010, Ch. 264, Sec. 14. Effective January 1, 2011.)

§ 3356. (a) If the operator does not appeal an order, if the operator does not timely seek judicial review of a decision affirming or modifying an order within the time provided in Section 3354, or if the operator has timely sought and obtained judicial review and the court has affirmed the decision, then any charge, including penalty and interest, that the decision permits the supervisor to impose on the operator for work performed by the supervisor or the supervisor's agents, and any civil penalties imposed under Section 3236.5 shall constitute a state tax lien against the real and personal property of the operator pursuant to Section 3423.

(b) In addition to a state tax lien, the supervisor may apply to the appropriate superior court for a clerk's judgment. The application, which shall include a certified copy of the final agency order or decision, shall constitute a sufficient showing to warrant the issuance of the judgment. The court clerk shall enter the judgment immediately in conformity with the application. The judgment so entered shall have the same force and effect as, and shall be subject to all the provisions of law relating to, a judgment in a civil action, and may be enforced in the same manner as any other judgment of the court.
(Amended by Stats. 2016, Ch. 274, Sec. 7. Effective January 1, 2017.)

§ 3357. (a) In any proceeding before the director, and in any proceeding instituted by the supervisor for the purpose of enforcing or carrying out the provisions of this division, or for the purpose of holding an investigation to ascertain the condition of any well or wells complained of, or which in the opinion of the supervisor may reasonably be presumed to be improperly located, drilled, operated, maintained, or conducted, the supervisor and the director shall have the power to administer oaths and may apply to a judge of the superior court of the county in which the proceeding or investigation is pending for subpoenas for witnesses to attend the proceeding or investigation. Upon the application of the supervisor or the director, the judge of the superior court shall assign a case number for the proceeding or investigation, shall issue an order prescribing the nature and scope of the proceeding or investigation, and shall retain jurisdiction for the limited purpose of enforcing subpoenas issued in the proceeding or investigation. Upon the assigning of a case number, the attorney of record for the supervisor or director may issue subpoenas directing witnesses to attend the proceeding or investigation, and those persons shall be required to produce, when directed, all records, surveys, documents, books, or accounts in the witness' custody or under the witness' control; except that no person shall be required to attend upon the proceeding unless the person resides within the same county or within 100 miles of the place of attendance. The attorney of record for the supervisor or the director may in that case cause the depositions of witnesses residing within or without the state to be taken in the manner prescribed by law for like depositions in civil actions in superior courts of this state under Title 4 (commencing with Section 2016.010) of Part 4 of the Code of Civil Procedure, and may issue subpoenas compelling the attendance of witnesses and the production of records, surveys, documents, books, or accounts at designated places within the limits prescribed in this section.

(b) (1) In conducting a proceeding or investigation specified in subdivision (a), the supervisor or director may require an owner or operator to furnish, under penalty of perjury, technical or monitoring reports that the supervisor or director requires. The burden, including costs, of any report shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the report. In requiring a report, the supervisor or director shall explain in writing to the owner or operator the need for the report, and shall identify the rationale that supports requiring that owner or operator to provide the report.

(2) When requested by the owner or operator furnishing the report, neither the division nor the department shall make available to the public for inspection portions of a report that might disclose trade secrets, well data granted confidential status pursuant to Section 3234, or other confidential or privileged information. The division or department shall make that confidential or privileged information available to other public agencies as needed for regulatory purposes and in accordance with a written agreement with the other public agency regarding the sharing of the information.

(c) In conducting a proceeding or investigation pursuant to subdivision (a), the supervisor or director, or his or her inspector, may inspect the well site or production facilities of any owner or operator to ascertain whether the owner or operator is complying with the requirements of or authorized by this division. The inspection shall be made with the consent of the owner or operator or, if consent is withheld, with a warrant duly issued pursuant to the procedure set forth in Title 13 (commencing with Section 1822.50) of Part 3 of the Code of Civil Procedure. In the event of an emergency affecting the public health or safety, an inspection may be performed without consent or a warrant. This subdivision is in addition to any other inspection authority granted or authorized by this division.

(Amended by Stats. 2016, Ch. 274, Sec. 8. Effective January 1, 2017.)

§ 3358. Witnesses shall be entitled to receive the fees and mileage fixed by law in civil causes, payable from the Oil, Gas, and Geothermal Administrative Fund.

(Amended by Stats. 2003, Ch. 240, Sec. 15. Effective August 13, 2003.)

§ 3359. In case of the failure or neglect on the part of any person to comply with any order of the supervisor or the director, or any subpoena, or upon the refusal of any witness to testify to any matter regarding which he may lawfully be interrogated, or upon refusal or neglect to appear and attend at any proceeding or hearing on the day specified, after having received a written notice of not less than 10 days prior to such proceeding or hearing, or upon his failure, refusal, or neglect to produce books, papers, or documents as demanded in the order or subpoena upon such day, such failure, refusal, or neglect shall constitute a misdemeanor. Each day's further failure, refusal, or neglect is a separate and distinct offense.

The district attorney of the county in which the proceeding, hearing, or investigation is to be held, shall prosecute any person guilty of violating this section by continuous prosecution until the person appears or attends or produces such books, papers, or documents, or complies with the subpoena or order of the supervisor or the director.

(Amended by Stats. 1974, Ch. 765.)

Article 7. Assessment and Collection of Charges

§ 3400. The charges directed to be levied by this article are necessary in the exercise of the police power of the State and o provide a means by which to supervise and protect deposits of oil and gas within the State, in which deposits the people of the State have a primary and supreme interest.
(Enacted by Stats. 1939, Ch. 93.)

§ 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, for the State Water Resources Control Board and the regional water quality control boards for their activities related to oil and gas operations that may affect water resources, and for the support of the State Air Resources Board and the Office of Environmental Health Hazard Assessment for their activities related to oil and gas operations that may affect air quality, public health, or public safety.

(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.
(Amended by Stats. 2016, Ch. 341, Sec. 5. Effective September 13, 2016.)

§ 3402. There shall annually be imposed upon the person operating each oil well in this state, or owning royalty or other interests in respect to the production from the well, a charge which shall be payable to the Treasurer and which shall be computed at a uniform rate per barrel of oil produced from the well for the preceding calendar year. The charge shall be apportioned among all of those persons in fractional amounts proportionate to their respective fractional interests in respect to the production of the well, but the whole of the charge shall be payable by the operator, who shall withhold their respective proportionate shares of the charge from the amounts otherwise payable or deliverable to the owners of royalty or other interests. In the case of a penalty for late payment as provided in Section 3420, no apportionment shall be made.
(Amended by Stats. 1988, Ch. 1077, Sec. 9.)

§ 3402.3. (a) Any increase by the department in the charge imposed pursuant to Section 3402 for deposit into the Oil, Gas, and Geothermal Administrative Fund for the purpose of completing workload requested in the 2010 Budget Act related to the acceleration of the remediation of orphaned oil facilities shall only be made for a period of four years.

(b) This section shall remain in effect only until July 1, 2015, and as of that date is repealed, unless a later enacted statute, that is enacted before July 1, 2015, deletes or extends that date.

(Added by Stats. 2010, Ch. 718, Sec. 7. Effective October 19, 2010. Repealed as of July 1, 2015, by its own provisions.)

§ 3403. There shall annually be imposed upon the person operating each gas well in this state, or owning royalty or other interests with respect to the production from the well, a charge, which shall be payable to the Treasurer, based upon the amount of gas produced in the preceding calendar year, other than gas which is used for recycling or otherwise in oil-producing operations, and which shall be computed at a uniform rate per ten thousand cubic feet. The charge shall be apportioned among all of those persons in fractional amounts proportionate to their respective fractional interests with respect to the production of the well, but the whole of the charge shall be payable by the operator, who shall withhold the respective proportionate shares of the charge from the amounts otherwise payable or deliverable to the owners of royalty or other interests. In the case of a penalty for a late payment as provided in Section 3420, no apportionment shall be made.

(Amended by Stats. 1988, Ch. 1077, Sec. 10.)

§ 3403.5. (a) The Legislature finds that there are underground storage facilities for gas that utilize depleted or partially depleted oil or gas reservoirs. Purchased gas, usually from out of state, is injected for storage and withdrawn during peak load periods. The supervisor is required to maintain surveillance over these facilities to ensure that the original reserves are not lost, that drilling of new wells is conducted properly, and that no damage occurs to the environment by reason of injection and withdrawal of gas.

(b) In order to help support the regulatory effort of the supervisor, there shall be imposed an annual charge on operators of underground gas storage facilities to defray the regulatory costs incurred by the state in conducting the activities described in subdivision (a). Each underground gas storage facility operator shall pay a proportionate share of the total regulatory costs projected for each fiscal year based on the field capacity and number of wells for each underground gas storage facility. For each underground gas storage facility, the portion owed by the operator shall be computed by multiplying the operator's field capacity by the number of the operator's wells, and dividing that product by the statewide sum across all underground gas storage facilities of the product of the field capacity of each individual underground gas storage facility multiplied by the number of wells at that facility.

(c) In order to defray the costs of the response effort of the division in the event of a large, uncontrolled release of gas from an underground storage facility that poses a significant present

or potential hazard to public health and safety, property, or to the environment, there shall be an additional charge imposed entirely on the operator of the underground storage facility at which the uncontrolled leak or release of gas occurred. The charge shall be in the amount of the total directly associated costs incurred by the division in the previous calendar year in the course of responding to the release, including personnel hours, travel expenses, contracting costs, and any other directly associated costs incurred by the division.

(d) For purposes of this section, the following terms have the following meanings:

(1) “Field capacity” means the total gas storage capacity, including base and working gas capacity, of an underground gas storage facility, in cubic feet.

(2) “Wells” means all wells associated with an underground gas storage facility except those that have been plugged and abandoned pursuant to Section 3208 before the preceding calendar year.

(Amended by Stats. 2016, Ch. 673, Sec. 4. Effective January 1, 2017.)

§ 3404. The charges authorized by this article are in addition to any and all charges, taxes, assessments, or licenses of any kind or nature paid by or upon the properties assessed hereunder.

(Enacted by Stats. 1939, Ch. 93.)

§ 3405. The department shall prescribe the form and contents of all reports for making the charge or for other purposes to carry out the intent and provisions of this article, which form shall be mailed in duplicate to the person assessed under this article.

(Enacted by Stats. 1939, Ch. 93.)

§ 3406. Every person chargeable under this article, shall on or before March 15th of each year, file a report with the department. The report shall show all items of information demanded by the report, which are necessary to carry out this article. The report shall be verified by such person or officer as the department may designate.

(Amended by Stats. 1967, Ch. 529.)

§ 3407. The department may, for good cause shown, by order entered upon its records, extend for not exceeding thirty days, the time for filing any report required by this article.

(Enacted by Stats. 1939, Ch. 93.)

§ 3407.5. If the person filing the report required under Section 3406, by error or otherwise fails to include the full amount of oil or gas production in the report, the department shall make an estimate of the deficit, based on the monthly production reports filed by such person under Section 3227, and add it to the report. The department shall make a reasonable effort to reconcile the yearly report filed under Section 3406 with the data filed on the regular monthly production reports, before proceeding to change the report, but failure to do so shall not invalidate the assessment.

(Amended by Stats. 1992, Ch. 999, Sec. 17. Effective January 1, 1993.)

§ 3408. (a) If any person chargeable under this article fails or refuses to file with the department, within the time prescribed in this article, the verified report provided for in Section 3406, the department shall note failure or refusal as provided for in Section 3418.

(b) The department shall estimate the amount of oil and gas produced by the person and shall assess the person an assessment based upon the estimated production. A penalty assessment shall be added to the charge pursuant to Section 3420.
(Amended by Stats. 1992, Ch. 999, Sec. 18. Effective January 1, 1993.)

§ 3410. The department shall, on or before June 15th of each year, acting in conjunction with the Department of Finance, make an estimate of the amount of money which will be required to carry out the provisions of this chapter, including any adjustments for savings or increased expenditures in the current and prior fiscal years.
(Amended by Stats. 1977, Ch. 112.)

§ 3412. On or before the 15th of June of each year, the department shall determine the rate or rates which will produce the sums necessary to be raised as provided in Section 3410. Within the same time, the department shall extend into the proper column of the record of assessments the amount of charges due from each person.
(Amended by Stats. 1977, Ch. 112.)

§ 3413. Between the first of March and the 15th of June in each year, the department shall assess and levy the charges as provided in this article. The assessment shall be made against the person operating the property subject to assessment on the first Monday in March, except that, where the actual operation of any well has changed hands during the period for which the charge is imposed, the charge shall be apportioned to each operator upon the basis of the oil or gas produced during the period, and the lien provided for in Section 3423 shall be a lien against the property of each operator. If the name of the owner is unknown to the department the assessment shall be made against unknown owners.
Clerical errors occurring or appearing in the name of any person whose property is properly assessed and charged, or in the making or extension of any assessment or charge upon the records, which do not affect the substantial rights of the payer, shall not invalidate the assessment or charge.
(Amended by Stats. 1967, Ch. 529.)

§ 3417. The notice shall state:

(a) That the assessment of property and levy of charges under this article has been completed.

(b) That the records of assessments containing the charges due will be delivered to the State Controller on the first Monday in July.

(c) That if any person is dissatisfied with the assessment made or charge fixed by the department he may, at any time before the first Monday in July, apply to the Controller to have the assessment or charge corrected in any particular.
The omission to publish notice shall not affect the validity of any assessment levied pursuant to this article.
(Amended by Stats. 1975, Ch. 1049.)

§ 3418. The department shall prepare each year a record called the "Record of Assessments and Charges" in which shall be entered each assessment and levy or charge made by it upon the property assessed and charged under this article, describing the property assessed. The assessments may be classified and entered in such separate parts of the record as the department may prescribe. If such charges and assessments become delinquent as provided in Section 3420 of this code, in addition to the information contained in the "Record of Assessments and Charges" as herein provided, the department shall furnish to the State Controller upon his request the name and address of any owner of property assessed as such name and address last appears in the office of the tax assessor for county in which such land or a major portion thereof is situate.
(Amended by Stats. 1975, Ch. 1049.)

§ 3419. On or before the first of July the department shall deliver to the State Controller the record of assessments and charges, certified to by the director, which certificate shall be substantially as follows: "I, ____, Director of Conservation, do hereby certify that between the first of March and the first of July, 20__, I made diligent inquiry and examination to ascertain all property and persons, firms, corporations and associations subject to assessment as required by the provisions of this chapter, providing for the assessment and collection of charges; that I have faithfully complied with all the duties imposed upon me by law; that I have not imposed any unjust or double assessment through malice or ill will or otherwise; nor allowed any person, firm, corporation, or association, or property to escape a just assessment or charge through favor or regard or otherwise." Failure to subscribe the certificate to the record of assessments and charges, or any certificate, shall not affect the validity of any assessment or charge.
(Amended by Stats. 2008, Ch. 562, Sec. 11. Effective January 1, 2009.)

§ 3420. (a) (1) No charges shall be levied for assessments on oil and gas production of less than ten dollars ($10).

(2) The charges are due and payable on the first of July in each year for assessments of more than ten dollars ($10), but less than five hundred dollars ($500). The charges shall be delinquent if not paid on or before August 15th of each year.

(3) The charges are due and payable on the first of July in each year for assessments of five hundred dollars ($500) or more. One-half of the charges shall be delinquent if not paid on or before August 15th of each year. The remaining one-half of the charges shall be delinquent if not paid on or before the first of February of the following year.

(b) Any person who fails to pay any charge within the time required shall pay a penalty of 10 percent of the amount due, plus interest at the rate of 11/2 percent per month, or fraction thereof, computed from the delinquent date of the assessment until and including the date of payment.
(Amended by Stats. 1988, Ch. 351, Sec. 1.)

§ 3421. Every payment on a delinquent charge shall be applied as follows:
(a) First, to any interest due on the charge.
(b) Second, to any penalty imposed by this part.
(c) The balance, if any, to the charge itself.
(Added by Stats. 1990, Ch. 987, Sec. 3.)

§ 3423. (a) If any person fails to pay any charge or penalty imposed under this chapter at the time that it becomes due and payable, the amount thereof, including penalties and interest, together with any costs in addition thereto, shall thereupon be a perfected and enforceable state tax lien. Such a lien is subject to Chapter 14 (commencing with Section 7150) of Division 7 of Title 1 of the Government Code.
(b) For the purpose of this section only, “due and payable” means the date the charges required to be paid pursuant to Section 3420 are assessed under this chapter.
(Amended by Stats. 1980, Ch. 600, Sec. 8.)

§ 3423.2. A warrant may be issued by the Controller or his or her duly authorized representative for the collection of any charges, interest and penalties and for the enforcement of any such lien directed to the sheriff and shall have the same effect as a writ of execution. It may and shall be levied and sale made pursuant to it in the manner and with the same effect as a levy of and a sale pursuant to a writ of execution.
(Amended by Stats. 1996, Ch. 872, Sec. 127. Effective January 1, 1997.)

§ 3423.3. Notwithstanding any provisions of law to the contrary, the owner of said land may redeem from any execution sale within a period of three years upon payment of interest, penalties and charges as provided in the case of other sales of real property under execution.
(Added by Stats. 1979, Ch. 322.)

§ 3423.4. The sheriff shall receive, upon the completion of his or her services pursuant to a warrant, and the Controller is authorized to pay to him or her the same fees and commissions and expenses in connection with services pursuant to the warrant as are provided by law for similar services pursuant to a writ of execution; provided, that fees for publication in a newspaper shall be subject to approval by the Controller rather than by the court; the fees, commissions, and expenses shall be an obligation of the person or persons liable for the payment of the charges and may be collected from the person or persons by virtue of the warrant or in any other manner provided in this article for the collection of those charges.
(Amended by Stats. 1996, Ch. 872, Sec. 128. Effective January 1, 1997.)

§ 3423.6. In the event that the lien of the charges, penalties or interest attaches to real property from which the oil or gas is extracted and more than one parcel of property is included within the lien, the Controller may release by certificate pursuant to Section 7174 of the Government Code from the lien of said charges, interest, penalties, and costs, upon payment by the owner of any parcel or parcels of property of his proportionate share of the assessment of the oil or gas extracted from all land included within said lien owned by him.
(Amended by Stats. 1980, Ch. 600, Sec. 9.)

§ 3423.9. It is expressly provided that the remedies provided herein of the state shall be cumulative and that no action by the Controller shall be construed to be an election on the part of the state, or of any of its officers, to pursue any remedy hereunder to the exclusion of any other remedy for which provision is made in this article.
(Added by Stats. 1979, Ch. 322.)

§ 3424. All charges assessed and levied shall be paid to the State Treasurer upon the order of the Controller. The Controller shall record the payment of any charge.
(Amended by Stats. 1967, Ch. 529.)

§ 3425. Errors appearing upon the face of any assessment on the record of assessments, or overcharges may be corrected by the Controller, with the consent of the Department of Finance, in such manner as the Controller and the Department of Finance agree upon.
(Enacted by Stats. 1939, Ch. 93.)

§ 3426. The Controller shall, on or before the thirtieth day of May next following the delinquency of any charge, bring an action in the name of the people of the State, in the county in which the property assessed is situated, to collect any delinquent charges or assessments, together with any penalties or costs, which have not been paid and which are shown as delinquent upon the record of assessments and charges.
(Amended by Stats. 1977, Ch. 579.)

§ 3427. The Attorney General shall commence and prosecute any such action to final judgment.
(Amended by Stats. 2018, Ch. 349, Sec. 5. (AB 3257) Effective January 1, 2019.)

§ 3428. In such actions the record of assessments and charges, or a copy of so much thereof as is applicable, duly certified by the Controller, showing unpaid charges against any person assessed by the department, is prima facie evidence of the assessment, the delinquency, the amount of charges, penalties, and costs due and unpaid, that the person is indebted to the people of the State of California in the amount of charges and penalties therein appearing unpaid, and that all forms of law in relation to the assessment of the charges have been complied with.

The provisions of the Code of Civil Procedure relating to service of summons, pleadings, proofs, trials, and appeals are applicable to the proceedings.
(Amended by Stats. 1977, Ch. 579.)

§ 3429. Payment of the penalties and charges, or the amount of the judgment recovered in the action, shall be made to the State Treasurer.
(Enacted by Stats. 1939, Ch. 93.)

§ 3430. Any person claiming and protesting that the assessment made or charges assessed against him are void, in whole or in part, may bring an action against the State Treasurer for the recovery of the whole or any part of the charges, penalties, or costs paid on such assessment, upon the grounds stated in his protest. No action may be brought later than the third Monday in February next following the day upon which the charges were due, and unless the person has filed with the State Controller, at the time of payment of the charges, a written protest stating whether the whole assessment or charge is claimed to be void, or if a part only, what part, and the grounds upon which the claim is founded. When so paid under protest the payment shall not be regarded as voluntary.
(Enacted by Stats. 1939, Ch. 93.)

§ 3431. Whenever an action is commenced under the provisions of Section 3430, a copy of the complaint and of the summons shall be served upon the treasurer or his deputy and upon the supervisor or his deputy and upon the Attorney General or his deputy. At the time the treasurer demurs or answers, he may demand that the action be tried in the Superior Court of the County of Sacramento, which demand shall be granted.
(Amended by Stats. 1955, Ch. 1670.)

§ 3432. The Attorney General shall defend the action.
The provisions of the Code of Civil Procedure relating to pleadings, proofs, trials, and appeals are applicable to these proceedings.
(Amended by Stats. 2018, Ch. 349, Sec. 6. (AB3257) Effective January 1, 2019.)

§ 3433. Failure to begin the action within the time specified in section 3430 is a bar to recovery of the charges. In any such action the court may render judgment for the plaintiff for any part or portion of the charge, penalties, or costs found to be void and paid by plaintiff upon the assessment.
(Enacted by Stats. 1939, Ch. 93.)

Article 8. Recommendation of Maximum Efficient Rates of Production

§ 3450. The Legislature takes notice of the existence of the Conservation Committee of California Oil Producers and of the fact that said committee for a number of years last past, in the interest of the conservation of oil and gas, has made recommendations of maximum efficient rates of production and for the intrapool distribution of such maximum efficient rates of production with respect to oil pools, capacity production from which pools would result in a loss of ultimate production. The Legislature declares that recommendations for such purpose are in the interest of the conservation of the oil and gas resources of this State and that it is lawful for said committee or any other committee of oil producers to issue such recommendations as to any such oil pool and for producers of oil to comply therewith or to agree to comply therewith, provided:

(a) Copies of all such recommendations shall be currently delivered to the supervisor and shall be open to public inspection in the office of the supervisor; and

(b) Any such committee shall make available to the supervisor its records, files, minutes, reports and other data pertaining to such recommendations.

The supervisor in his discretion may join in any such recommendations or may express his disapproval thereof.

The supervisor, in the absence of such recommendations by a committee of oil producers with respect to any of such pools, or if the supervisor deems any such recommendations to be insufficient or incorrect, may issue recommendations with respect to any such pools on said subject matter, and it shall be lawful for producers to comply therewith or to agree to comply therewith. Neither a disapproval by the supervisor nor a recommendation by him shall constitute a basis for implying any obligation for producers of oil to comply with such a disapproval or recommendation.

Nothing herein contained shall be deemed to permit the production of gas in violation of Articles 5 and 6 of Chapter 1 and Chapter 2 of this division.
(Added by Stats. 1955, Ch. 258.)

§ 3451. “Maximum Efficient Rate,” commonly referred to as “MER,” is defined as the highest daily rate of production which can be sustained economically from a particular pool, from existing wells and facilities, for a reasonable period without loss of economically recoverable ultimate production of oil from such pool.
(Added by Stats. 1957, Ch. 437.)

CHAPTER 2. Wasting of Natural Gas

§ 3500. All persons, firms, corporations, and associations are prohibited from willfully permitting natural gas wastefully to escape into the atmosphere.
(Enacted by Stats. 1939, Ch. 93.)

§ 3501. Any person, firm, corporation, or association who digs, drills, excavates, constructs, or owns, or controls a well from which natural gas flows shall, upon the abandonment of the well, cap or otherwise close the mouth of or entrance to the well in such a manner as to prevent the unnecessary or wasteful escape of natural gas into the atmosphere.
No person, firm, corporation, or association who owns or controls land in which such a well is situated shall willfully permit natural gas flowing from the well wastefully or unnecessarily to escape into the atmosphere.
(Enacted by Stats. 1939, Ch. 93.)

§ 3502. Any person, firm, corporation, or association who willfully violates any of the provisions of this chapter is guilty of a misdemeanor, punishable by a fine of not more than one thousand dollars or by imprisonment in the county jail for not more than one year, or by both such fine and imprisonment.
(Enacted by Stats. 1939, Ch. 93.)

§ 3503. Each day during which natural gas is willfully allowed wastefully or unnecessarily to escape into the atmosphere is a separate and distinct violation of this chapter.
(Enacted by Stats. 1939, Ch. 93.)

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.
(Repealed and added by Stats. 1947, Ch. 1559.)

§ 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.
(Repealed and added by Stats. 1947, Ch. 1559.)

§ 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.
(Amended by Stats. 1955, Ch. 1218.)

§ 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.
(Added by Stats. 1955, Ch. 1218.)

§ 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.
(Added by Stats. 1957, Ch. 405.)

§ 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.
(Repealed and added by Stats. 1947, Ch. 1559.)

§ 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.
(Repealed and added by Stats. 1947, Ch. 1559.)

§ 3605. The provisions of this chapter do not apply to any field producing oil or gas on August 14, 1931.
(Repealed and added by Stats. 1947, Ch. 1559.)

§ 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.
(Amended by Stats. 1959, Ch. 1514.)

§ 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.
(Added by Stats. 1955, Ch. 925.)

§ 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.
(Repealed and added by Stats. 1947, Ch. 1559.)

§ 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 lands 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.
(Amended by Stats. 1961, Ch. 2074.)

§ 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.
(Added by Stats. 1957, Ch. 405.)

§ 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.
(Added by Stats. 1973, Ch. 864.)

CHAPTER 3.5. Unit Operation

Article 1. Declaration of Policy

§ 3630. The Legislature hereby finds and declares that the management, development, and operation of lands as a unit for the production of oil and gas aids in preventing waste, increases the ultimate recovery of oil and gas, and facilitates increased concurrent use of surface lands for other beneficial purposes.
(Added by Stats. 1971, Ch. 1673.)

§ 3631. Nothing in this chapter shall be construed in such a manner as to conflict with the provisions of Article 2 (commencing with Section 6826) of Chapter 3 of Part 2 of Division 6.
(Added by Stats. 1971, Ch. 1673.)

Article 2. Definitions

§ 3635. Unless the context otherwise requires, the definitions in this article govern the construction of this chapter.
(Added by Stats. 1971, Ch. 1673.)

§ 3635.1. "Person" means any natural person, corporation, association, partnership, limited liability company, joint venture, receiver, trustee, executor, administrator, guardian, fiduciary, or other representative of any kind and includes the state and any city, county, city and county, district or any department, agency, or instrumentality of the state or of any governmental subdivision whatsoever.
(Amended by Stats. 1994, Ch. 1010, Sec. 206. Effective January 1, 1995.)

§ 3635.2. "Land" means both surface and mineral rights.
(Added by Stats. 1971, Ch. 1673.)

§ 3635.3. "Pool" means an underground reservoir containing, or appearing at the time of determination to contain, a common accumulation of crude petroleum oil or natural gas or both. Each zone of a general structure which is separated from any other zone in the structure is a separate pool.
(Added by Stats. 1971, Ch. 1673.)

§ 3635.4. "Field" means the same general surface area which is underlaid or reasonably appears to be underlaid by one or more pools.
(Added by Stats. 1971, Ch. 1673.)

§ 3635.5. "Tracts of land" means land areas under separate ownership which are all of the following:

(a) Contiguous either on the surface or in the subsurface.

(b) Located within a field which has been producing for more than 20 years.

(c) Located within a field over 75 percent of which lies within incorporated areas.

(Added by Stats. 1971, Ch. 1673.)

§ 3636. "Unit agreement" means and includes, in addition to the unit agreement entered into pursuant to the provisions of Article 3 (commencing with Section 3640) of this chapter, any consent agreement or other agreement entered into in connection with, and supplemental to,

such unit agreement, but does not include a unit operating agreement or any preliminary agreement confined to effectuating any exchange of interests in land which the parties to such preliminary agreement may desire. “Unit operating agreement” means an agreement, entered into by the working interest owners only, governing all operations performed by the unit operator pursuant to the unit agreement and the unit operating agreement for the production of unitized substances.
(Added by Stats. 1971, Ch. 1673.)

§ 3636.1. “Unit area” means all lands included within an area subject to a unit agreement entered into pursuant to the provisions of Article 3 (commencing with Section 3640) of this chapter.
(Added by Stats. 1971, Ch. 1673.)

§ 3636.2. “Unit production” means all oil, gas, and other hydrocarbon substances produced from a unit area from the effective date of a unit agreement approved by the supervisor pursuant to Section 3643.
(Added by Stats. 1971, Ch. 1673.)

§ 3636.3. “Unit operator” means the person or persons designated by the working interest owners as operator or operators of the unit area.
(Added by Stats. 1971, Ch. 1673.)

§ 3637. “Working interest” means an interest held in lands by virtue of fee title, including lands held in trust, a lease, operating agreement, or otherwise, under which the owner of such interest has the right to drill for, develop, and produce oil and gas. A working interest shall be deemed vested in the owner thereof even though his right to drill or produce may be delegated to an operator under a drilling and operating agreement, unit agreement, or other type of operating agreement.
(Added by Stats. 1971, Ch. 1673.)

§ 3637.1. “Working interest owner” means a person owning a working interest.
(Added by Stats. 1971, Ch. 1673.)

§ 3637.2. “Royalty interest” means a right to or interest in oil and gas produced from any lands or in the proceeds of the first sale thereof other than a working interest.
(Added by Stats. 1971, Ch. 1673.)

§ 3637.3. “Royalty interest owner” means a person owning a royalty interest.
(Added by Stats. 1971, Ch. 1673.)

Article 3. Unit Agreements

§ 3640. Tracts of land may be unitized as provided in this article to provide for the management, development, and operation thereof as a unit to prevent, or to assist in preventing, waste and to increase the ultimate recovery of oil and gas.
(Added by Stats. 1971, Ch. 1673.)

§ 3641. An agreement for the management, development, and operation of two or more tracts of land in the same field or in the same producing or prospective pool as a unit without regard to separate ownerships, and for the allocation of benefits and costs on a basis set forth in such agreement, shall be valid and binding upon those who consent thereto and may be filed with the supervisor for approval. However, unless and until the agreement qualifies for approval, and is approved, by the supervisor persons who do not consent thereto shall not be bound thereby, nor shall their rights be affected thereby.
(Added by Stats. 1971, Ch. 1673.)

§ 3642. Any proposed agreement for unit operation of tracts of land which has been consented to by persons who own title to working interests which aggregate at least an undivided three-fourths of the total working interests in the area proposed to be unitized, and by persons who own title to the royalty interest which aggregates at least an undivided three-fourths of the total royalty interest in the area proposed to be unitized, may be filed with the supervisor by the owner of any such working interest in conjunction with a petition requesting approval thereof.
(Amended by Stats. 1975, Ch. 644.)

§ 3643. The unit agreement shall be approved, if, after a public hearing, the supervisor finds all of the following:

(a) The unit area of the proposed agreement for unit operation takes in all tracts which, consistent with good oilfield practice, should be considered a part of and related to the field or pool or pools, or portions thereof, proposed for unit operation but does not include tracts which, consistent with good oilfield practice, should not be considered a part of or related to the field or pool or pools, or portions thereof, proposed for unit operation.

(b) As of the date of filing of the petition, the proposed unit agreement was consented to by persons owning at least three-fourths of the working interests and three-fourths of the lessors' royalty interests as described in Section 3642.

(c) The unitized management and operation of the pool or pools, or portions thereof, proposed to be unitized is reasonably necessary in order to carry on pressure maintenance or pressure replenishment operations, cycling or recycling operations, gas injection operations, water flooding operations, reduction of oil viscosity operations, or any combination thereof, or any other form of joint effort calculated to increase the ultimate recovery of oil and gas from the proposed unit area.

(d) The value of the estimated recovery of additional oil or gas, or the increased present worth value due to accelerated recovery of oil or gas, as a result of the unit operations will exceed the estimated additional cost incident to conducting such operations.

(e) The proposed unit agreement provides for an allocation of the unit production among and to the separately owned tracts in the area proposed to be unitized such as will reasonably permit persons otherwise entitled to share in or benefit by the production from such separately owned tracts to produce or receive, in lieu thereof, their fair, equitable, and reasonable pro rata share of the unit production or other benefits thereof.

(f) The proposed unit agreement provides, to the full extent practical, for the organization and consolidation of surface facilities, including oil production, storage, treatment, and transportation facilities, in such a manner as will eliminate wasteful and excessive use of land surface areas, freeing such areas for other productive use and development, and provides a fair procedure for the waiver, from time to time, of the working interest owners' right of entry on surface areas which in the future become unneeded for the conduct of unit operations.

(g) The proposed unit agreement is fair and reasonable under all the circumstances in other material respects.

(h) If state-owned lands under the jurisdiction of the State Lands Commission are included in the proposed unit agreement, such agreement has been reviewed and approved by the commission as to such lands.

(Amended by Stats. 1975, Ch. 644.)

§ 3644. A tract of land's fair, equitable, and reasonable share of the unit production shall be measured by the value of such tract for oil and gas purposes and its contributing value to the unit in relation to like values of other tracts in the unit area, taking into account, among other things, the following:

(a) The primary tract value based upon the projected future value of hydrocarbon substances that would be produced by primary means from such tract after the date of unitization, if no secondary recovery operation were undertaken.

(b) The secondary tract value based upon consideration of the following factors:

(1) The volume in acre-feet of porous, permeable sand originally saturated with hydrocarbon substances within a zone to be unitized, and underlying such tract.

(2) The hydrocarbon substances per acre-foot of such zone recoverable by means of secondary recovery operations.

(3) The value of the hydrocarbon substances so recoverable from such tract from such zones to be unitized.

(4) In the event the necessary data is not available as listed in paragraphs (1), (2), and (3), the value may be assigned using a prudent engineering method, depending on the data available.

(c) All other factors which significantly bear upon the value of the committed properties for primary and secondary recovery.

(Added by Stats. 1971, Ch. 1673.)

§ 3645. Upon giving his approval to the unit agreement pursuant to Section 3643, the supervisor shall issue an order directing unit operations of the unit area in accordance with the unit agreement, directing the recordation of such agreement in the office of the county recorder

in each county in which any part of the unit area is situated, and requiring that the interests of all persons in the unit area be thereafter subject to the unit agreement the same as if all such persons had expressly consented to the unit agreement. An order of the supervisor issued pursuant to this section shall become effective on the date provided for in the order, except that no such order shall become effective until all interests in the unit area for which timely offers of sale have been made pursuant to Section 3647 have been purchased as provided in that section, or until the termination of such offers of sale.
(Amended by Stats. 1973, Ch. 1129.)

§ 3646. The supervisor's order shall include fair and reasonable provisions for all of the following:

(a) The date when all tracts of land not theretofore committed to the unit shall be subject to unit operation, which date shall not be earlier than the first day of the month following the effective date of the supervisor's order.

(b) Provision for the carrying or otherwise financing of any persons who request the same and who the supervisor determines are unable to meet their financial obligations in connection with the unit operation, allowing a reasonable interest charge to those who carry or finance such obligations.

(c) Such additional provisions which the supervisor determines to be appropriate for bringing into the unit area on a fair and reasonable basis tracts of land and interests not theretofore committed to the unit agreement.
(Added by Stats. 1971, Ch. 1673.)

§ 3647. The owner of any working interest or royalty interest in a tract which is the subject of a unit agreement who did not consent to the proposed unit agreement shall, 60 days following the date upon which the supervisor issues his order under the provisions of Section 3645, be entitled to offer his interest for sale pursuant to this section. All working interest owners who consented to the proposed unit agreement shall be entitled to participate in purchasing such interest in proportion to their respective shares of unit production. Unless one or more working interest owners purchase such interest, the order of the supervisor shall not become effective.

If a disagreement arises with respect to the price at which such an interest shall be purchased, then either party may request the supervisor to authorize the creation of an arbitration committee consisting of three members, one member appointed by the seller, one member appointed by the purchaser or purchasers and a third member selected by the other two members, to make an independent appraisal of the value of the interest as of the date the supervisor issued his order under Section 3645. Such committee shall consider all relevant data and information submitted by interested parties and may seek and consider such other information as it deems relevant. The arbitration committee shall determine the fair market value of the interest as of the date the supervisor issued his order under Section 3645 and fix the price at which the sale shall be consummated, and its determination shall be binding on the parties; except that, within 30 days after the determination of the arbitration committee has been

mailed to the parties concerned, the seller or the purchaser or any one or more of the purchasers may have such price judicially determined by filing suit for a declaratory judgment as to the fair market value in the superior court for the county in which the tract involved, or the greater portion of it, lies. The compensation and expenses of the arbitration committee shall be subject to approval in amount by the supervisor and, if the unit becomes effective, shall be paid by the working interest owners who elected to participate in purchasing such interest in the proportion they share unit expenses. If the unit does not become effective within the time provided for in the order of the supervisor issued under Section 3645, the working interest owners who have consented to the unit agreement and have requested the independent appraisal shall pay such compensation and expenses in proportion to what would have been their share of unit expenses.
(Amended by Stats. 1975, Ch. 644.)

§ 3648. Any unit agreement approved by the supervisor shall contain a provision under which a party whose surface land is being utilized for the benefit of the unit area shall be entitled to compensation for the reasonable value of the use of such surface.
(Added by Stats. 1971, Ch. 1673.)

§ 3649. Any proposed modification of an approved unit agreement shall be submitted by the unit operator to the supervisor for his review and approval. No modification shall alter or change the basis for allocating production to tracts of land theretofore committed to the unit area without the express written consent of all persons who might be adversely affected thereby. The supervisor shall approve the proposed modification if, after a public hearing, he finds that the proposed unit agreement modification is consented to by persons who own title to working interests which aggregate at least an undivided three-fourths of the total working interests within the unit area and by persons who own title to the royalty interest which aggregate at least an undivided three-fourths of the total royalty interest in the unit area, that the proposed modification is in conformity with other provisions of the unit agreement, that it is consistent with the purpose of this chapter, and is fair and reasonable under all the circumstances. Upon approval, the unit agreement modification shall be recorded in the office of the county recorder in each county in which any part of the unit area is situated and thereafter shall be binding upon all persons having any interest in the pool or pools, or portions thereof, subject to the unit agreement the same as if all such persons had expressly agreed to the modification.
Nothing in this section shall be construed as applying to any modification of a unit operating agreement entered into exclusively by the working interest owners.
(Amended by Stats. 1975, Ch. 644.)

§ 3650. If at any time after the entry of an order of unitization issued pursuant to Section 3645, it develops that all or a portion of a further tract or tracts of land should be included within the unit area, persons who own any working interest in the pool or pools, or portions thereof, may file a petition with the supervisor requesting the addition of such tract or tracts of land to the unit

area, insofar as they contain the pool or pools, or portions thereof. Upon the filing of such a petition, the supervisor shall hold a public hearing.
(Amended by Stats. 1975, Ch. 644.)

§ 3651. The supervisor shall issue his order that such further tract or tracts of land insofar as they contain the pool or pools, or portions thereof, and the interests of all persons therein, upon recordation of such order in the office of the county recorder in each county in which any part of the original unit area or such additional tracts are situated, shall thereafter be subject to unit operations if he finds all of the following:

(a) All or a portion of such further tract or tracts of land do contain the pool or pools, or portions thereof, previously ordered unitized by the supervisor.

(b) The unit agreement has been consented to by persons who own title to working interests which aggregate at least an undivided three-fourths of the working interests in the total area proposed to be unitized, and by persons who own title to the royalty interest which aggregates at least an undivided three-fourths of the royalty interest in the total area proposed to be unitized.

(c) The addition of such further tract or tracts of land insofar as they contain the pool or pools to the unit operations is reasonably necessary in order to prevent waste or to increase the ultimate recovery of oil and gas.
(Amended by Stats. 1975, Ch. 644.)

§ 3652. The supervisor's order issued pursuant to Section 3651 shall contain a fair basis for allocating production to such further tract or tracts of land and make fair and reasonable provisions under the circumstances in other respects for bringing into the unit operation such tract or tracts of land. In providing for the allocation of unit production from the enlarged unit area, the order shall, however, first treat the unit area previously established as a single tract, and the portion of unit production so allocated thereto shall then be allocated among the separately owned tracts of land included in such previously established unit area in the same proportion as specified therefor in the previous order. The supervisor shall allocate production from the enlarged unit area between the previously established unit area and the additional tract or tracts of land, and if there be more than one such additional tract of land, shall allocate the production allotted the additional tracts of land as between such additional tracts of land, in such a manner as will reasonably permit persons otherwise entitled to share in or benefit by the production from such tracts of land to produce or receive, in lieu thereof, their fair, equitable, and reasonable pro rata share of the unit production or other benefits thereof. A tract's fair, equitable, and reasonable share of the unit production shall be measured by the value of each such tract of land for oil and gas purposes and its contributing value to the unit operation in relation to like values of other tracts in the unit, taking into account, among other things, the following:

(a) The primary tract value based upon the projected future value of hydrocarbon substances that would be produced by primary means from such tract after the date of unitization, if no secondary recovery operation were undertaken.

(b) The secondary tract value based upon consideration of the following factors:

(1) The volume in acre-feet of porous, permeable sand originally saturated with hydrocarbon substances within a zone to be unitized, and underlying such tract.

(2) The hydrocarbon substances per acre-foot of such zone recoverable by means of secondary recovery operations.

(3) The value of the hydrocarbon substances so recoverable from such tract from such zones to be unitized.

(4) In the event the necessary data is not available as listed in paragraphs (1), (2), and (3), the value may be assigned using a prudent engineering method, depending on the data available.

(c) All other factors which significantly bear upon the value of the committed properties for primary and secondary recovery.

(Added by Stats. 1971, Ch. 1673.)

§ 3653. Any disagreement with respect to the unit operation between persons owning any interest in the pool or pools, or portions thereof, subject to the unit agreement may be submitted to the supervisor for his review and decision.

(Amended by Stats. 1975, Ch. 644.)

§ 3653.5. A petition requesting approval of a unit agreement and each copy thereof shall contain or have attached to it:

(a) A request that the supervisor approve the unit agreement.

(b) A copy of the unit agreement.

(c) A report with appropriate engineering, reservoir, and geologic data and maps outlining in detail how the unit agreement qualifies for approval pursuant to this chapter.

(d) Evidence that the required number of working interest owners and royalty interest owners have consented to the unit agreement. Generally, such evidence shall consist of a certificate of the petitioner or unit operator that the requisite number of working interest owners and royalty interest owners have consented to the unit agreement; provided, however, that if the accuracy of the certificate is challenged by any person, additional evidence will be required. Additional evidence may be supplied by the petitioner or requested by the supervisor.

(Added by Stats. 1975, Ch. 644.)

§ 3654. Any and all decisions or determinations made by the supervisor under the provisions of this chapter shall be appealable to any court of competent jurisdiction by any person whose interests are affected by any such decision or determination. Except as otherwise provided in this article, such appeal must be made within 60 days from the date of such decision or determination.

(Added by Stats. 1971, Ch. 1673.)

§ 3655. The three-fourths interests referred to in Sections 3642, 3649, and 3651 shall be determined as follows:

(a) A total value, composed of the combined value of all of the primary tract assignment and secondary tract assignment, shall be assigned to all of the tracts of land which are the subject of the unit agreement or the proposed unit agreement.

(b) The pro rata interest of each working interest owner shall be equal to a fraction, the numerator of which shall be the total value of the primary tract assignment and secondary tract assignment of the tract or tracts in which he has a working interest, in accordance with his fractional share of such interest, if any, and the denominator of which shall be the value determined under subdivision (a).

(c) The pro rata interest of each royalty interest owner shall be equal to a fraction, the numerator of which shall be the total value of the primary tract assignment and secondary tract assignment of the tract or tracts in which he has a royalty interest, in accordance with his fractional share of such interest, if any, and the denominator of which shall be the value determined under subdivision (a).

If there are no royalties outstanding with respect to a tract or tracts of land included within or proposed to be included within a unit area, then for the purpose of determining the three-fourths of royalty interests the working interest owners in any such tract of land shall be deemed to be the owners of a royalty with respect to such tract in the same proportion as their ownership of the working interest therein.
(Added by Stats. 1971, Ch. 1673.)

§ 3656. No unit agreement approved by the supervisor pursuant to the provisions of this chapter shall effect or result in, or be construed to effect or result in, the alienation, transfer, or change of any title or ownership, legal or equitable, of any person or party in or to any tract of land or the mineral rights therein to any other person or party.
(Added by Stats. 1971, Ch. 1673.)

§ 3657. Operations incident to the drilling, producing, or operating of a well or wells on any portion of a unit area under a unit agreement approved by the supervisor pursuant to the provisions of this chapter shall be deemed, for the purposes of determining compliance with lease and other contractual obligations, the conduct of such operations on each separately owned tract in the unit area by the several working interest owners thereof. That portion of the production allocated to each tract of land included in the unit area, when produced, shall be deemed for all purposes to have been produced from such tract by a well or wells drilled therein.
(Added by Stats. 1971, Ch. 1673.)

§ 3658. Any order of the supervisor issued pursuant to this article shall, from and after its effective date, be effective as to, and be binding upon, each person owning an interest in the unit area covered thereby, or in the oil and gas produced therefrom, or the proceeds thereof. Each such person shall have the right to enforce the provisions of the unit agreement, including, but not limited to, the provisions for determining rates of production, whether or not such person expressly consented to the unit agreement.

(Added by Stats. 1971, Ch. 1673.)

§ 3659. Prior to any public hearing held by the supervisor pursuant to this chapter, the supervisor shall give reasonable written notice of the hearing to all persons shown by the records of the tax assessor to have an interest in the land proposed for unit operation, and shall give written notice to any city within which the land lies and, with respect to land which lies in an unincorporated area, to the county in which the land lies. Such city or county or any other interested person may, on any matter relevant to the proposed agreement for operation, submit testimony and evidence for the consideration of the supervisor.
(Added by Stats. 1971, Ch. 1673.)

Article 4. Liens

§ 3680. A person to whom another is indebted for expenses incurred in carrying on unit operations may, in order to secure payment of the amount due, fix a lien upon the interest of the debtor in the unit production as and when produced from the unit area by filing for record with the recorder of the county where the property or a portion thereof involved is located, an affidavit setting forth all of the following:

(a) In general terms the kind of materials, tools, equipment, or supplies furnished or labor or services performed.

(b) A description of the land involved, the name of the debtor, and his interest in the production from the unit area.

(c) The amount which is still due and unpaid.

(d) A statement that at least 20 days prior to the date of the affidavit such person gave written notice to the debtor by registered mail at his last known address, setting forth the information required under subdivisions (a), (b), and (c) of this section.

Any such affidavit shall be filed for record not later than 90 days after the delivery of the property or the completion of the labor.
(Added by Stats. 1971, Ch. 1673.)

§ 3681. The lien shall be a first lien on the production and otherwise shall be of the same nature and subject to foreclosure in the same manner and within the same time as mechanics' liens. In any case where the lien claimant is in possession of the production which is subject to the lien, the supervisor may authorize the lien claimant to sell such production or so much thereof as may be necessary to satisfy such lien, provided that the supervisor shall hold or arrange for the holding of the proceeds of such sale for appropriate distribution upon a determination of the controversy.
(Added by Stats. 1971, Ch. 1673.)

Article 5. Regulations

§ 3685. Within three months after the effective date of this chapter, the supervisor shall, after one or more public hearings, adopt regulations governing the submittal of proposed unit agreements, modifications thereof, additions thereto, and disagreements with respect to unit operations. The regulations shall include, but not be limited to, requirements for filing fees sufficient to cover the costs of administration, and submittal of policies of title insurance. The regulations may be amended from time to time by the supervisor with the approval of the director.
(Added by Stats. 1971, Ch. 1673.)

Article 6. Preemption

§ 3690. This chapter shall not be deemed a preemption by the state of any existing right of cities and counties to enact and enforce laws and regulations regulating the conduct and location of oil production activities, including, but not limited to, zoning, fire prevention, public safety, nuisance, appearance, noise, fencing, hours of operation, abandonment, and inspection.
(Added by Stats. 1971, Ch. 1673.)

CHAPTER 4. Geothermal Resources

§ 3700. It is hereby found and determined that the people of the State of California have a direct and primary interest in the development of geothermal resources, and that the State of California, through the authority vested in the State Oil and Gas Supervisor, should exercise its power and jurisdiction to require that wells for the discovery and production of geothermal resources be drilled, operated, maintained and abandoned in such manner as to safeguard life, health, property, and the public welfare, and to encourage maximum economic recovery.
(Amended by Stats. 1967, Ch. 1398.)

§ 3701. For the purposes of this chapter, “geothermal resources” shall mean geothermal resources as defined in Section 6903 of this code.
(Amended by Stats. 1967, Ch. 1398.)

§ 3702. For the purposes of this chapter, “geothermal resources area” means the same general surface area which is underlaid, or reasonably appears to be underlaid, by geothermal resources.
(Amended by Stats. 1971, Ch. 1213.)

§ 3703. “Well” means any well for the discovery of geothermal resources or any well on lands producing geothermal resources or reasonably presumed to contain geothermal resources, or

any special well, converted producing well or reactivated or converted abandoned well employed for reinjecting geothermal resources or the residue thereof.
(Amended by Stats. 1967, Ch. 1398.)

§ 3703.1. "Low-temperature geothermal resources" are fluids that have value by virtue of the heat contained therein and have a temperature that is not more than the boiling point of water at the altitude of occurrence.
(Amended by Stats. 1988, Ch. 1077, Sec. 11.)

§ 3704. "Department", in reference to the government of this state, means the Department of Conservation.
(Added by Stats. 1965, Ch. 1483.)

§ 3705. "Division," in reference to the government of this state, means the Division of Oil, Gas, and Geothermal Resources in the Department of Conservation.
(Amended by Stats. 1992, Ch. 999, Sec. 19. Effective January 1, 1993.)

§ 3706. "Director" means the Director of Conservation.
(Added by Stats. 1965, Ch. 1483.)

§ 3707. "Supervisor" means the State Oil and Gas Supervisor.
(Added by Stats. 1965, Ch. 1483.)

§ 3708. "Person" includes any individual, firm, association, corporation, or any other group or combination acting as a unit.
(Added by Stats. 1965, Ch. 1483.)

§ 3709. "Operator" means any person drilling, maintaining, operating, pumping, or in control of any well.
(Added by Stats. 1965, Ch. 1483.)

§ 3710. "Owner" includes "operator" when any well is operated or has been operated or is about to be operated by any person other than the owner.
(Added by Stats. 1965, Ch. 1483.)

§ 3711. "Operator" includes "owner" when any well is or has been or is about to be operated by or under the direction of the owner.
(Added by Stats. 1965, Ch. 1483.)

§ 3712. This chapter shall be liberally construed to meet its purposes, and the director and the supervisor, acting with the approval of the director, shall have all powers which may be

necessary to carry out the purposes of this chapter, including the authority to adopt rules and regulations.
(Amended by Stats. 1992, Ch. 999, Sec. 20. Effective January 1, 1993.)

§ 3714. The State Oil and Gas Supervisor shall so supervise the drilling, operation, maintenance and abandonment of geothermal resources wells as to encourage the greatest ultimate economic recovery of geothermal resources, to prevent damage to life, health, property, and natural resources, and to prevent damage to, and waste from, the underground geothermal deposits, and to prevent damage to underground and surface waters suitable for irrigation or domestic purposes by reason of the drilling, operation, maintenance, and abandonment of geothermal resources wells.
(Amended by Stats. 1970, Ch. 117.)

§ 3714.5. The supervisor, pursuant to regulation, shall designate geothermal resources areas and may exclude from the operation of this chapter certain wells within such geothermal resources areas when there is no probability of encountering geothermal resources.
(Added by Stats. 1972, Ch. 1102.)

§ 3715. The supervisor shall also supervise the drilling, operation, maintenance, and abandonment of wells so as to permit the owners or operators of such wells to utilize all methods and practices known to the industry for the purpose of increasing the ultimate recovery of geothermal resources and which, in the opinion of the supervisor, are suitable for such purpose in each proposed case. In order to further the elimination of waste by increasing the recovery of geothermal resources it is hereby declared as a policy of this state that the grant in a geothermal resources lease or contract to a lessee or operator of the right or power, in substance, to explore for and remove all geothermal resources from any lands in the State of California, in the absence of an express provision to the contrary contained in such lease or contract, is deemed to allow the lessee or contractor or his successors or assigns, to do what a prudent operator using reasonable diligence would do, having in mind the best interest of the lessor, lessee and the state, in producing and removing geothermal resources; provided, however, nothing contained in this section imposes a legal duty upon such lessee or contractor, his successors or assigns, to conduct such operations.
(Amended by Stats. 1967, Ch. 1398.)

§ 3715.5. For the purposes of the California Environmental Quality Act (commencing with Section 21000), the division shall be the lead agency as defined in Section 21067 for all geothermal exploratory projects as defined in Section 21065.5. The division shall complete all its responsibilities pursuant to the California Environmental Quality Act, including public and agency review and approval or disapproval of the project, within 135 days of the receipt of the application for such project. The division may delegate its lead agency responsibility under this section to a county which has adopted a geothermal element, as defined in Section 25133, for its general plan. Any such delegation shall provide that the county complete its lead agency

responsibility under this section within 135 days of the receipt of the application for such project. The provisions of this section shall not apply to geothermal exploratory projects as defined in Section 21065.5 where, prior to January 1, 1979, preparation of an environmental impact report for such project has begun or an application for such project which will require preparation of an environmental impact report has been filed.
(Added by Stats. 1978, Ch. 1271.)

§ 3716. The district deputy in each district shall collect all information regarding the wells in the district necessary for the proper supervision of the wells. The district deputy shall prepare maps and other accessories necessary to determine the underground conditions in a geothermal area and the location and extent of strata bearing water suitable for irrigation or domestic purposes or surface water suitable for those purposes. This work shall be done with the view to advising the operators as to the best means of protecting the geothermal resource deposits and the water-bearing strata and surface water, and with a view to aiding the supervisor in ordering tests or repair work at wells. All the data shall be kept on file in the office of the district deputy of the respective district, and copies thereof shall be available, upon request, to the Director of Water Resources, the State Geologist, and the appropriate California regional water quality control board located in the area involved, subject to Section 3752.
(Amended by Stats. 1988, Ch. 1077, Sec. 12.)

§ 3717. Upon request, the supervisor shall notify the Department of Fish and Game and the California regional water quality control board in the area affected of the location and abandonment of geothermal wells.
(Amended by Stats. 1988, Ch. 1077, Sec. 13.)

§ 3718. Nothing in this chapter shall be construed as superseding any of the provisions of Division 7 (commencing with Section 13000) of the Water Code or Division 6 (commencing with Section 5650) of the Fish and Game Code.
(Added by Stats. 1965, Ch. 1483.)

§ 3719. The supervisor shall publish any publications, reports, maps, statistical data or other printed matter relating to geothermal resources, for which there may be public demand. If these publications, reports, maps, statistical data or other printed matter are sold, they shall be sold at cost, and the proceeds shall be deposited in the Oil, Gas, and Geothermal Administrative Fund.
(Amended by Stats. 2003, Ch. 240, Sec. 16. Effective August 13, 2003.)

§ 3720. For the purposes of this chapter, the state may be divided into one or more districts, the boundaries of which shall be fixed by the director.
(Amended by Stats. 1971, Ch. 1213.)

§ 3721. Every owner or operator of any well shall designate an agent, giving his or her address, who resides in this state, to receive and accept all orders, notices, and processes of

the supervisor or any court of law. Every person so appointing an agent shall, within five days after the termination of the agency, notify the supervisor, in writing, of such termination, and unless operations are discontinued, shall appoint a new agent.
(Amended by Stats. 1984, Ch. 278, Sec. 11.)

§ 3722. The owner or operator of any well shall notify the supervisor or the district deputy, in writing, in such form as the supervisor or the district deputy may direct, of the sale, assignment, transfer, conveyance, or exchange by the owner or operator of such well, and the land, owned or leased, upon which the well is located, within 30 days after such sale assignment, transfer, conveyance, or exchange. The notice shall contain the following:

(a) The name and address of the person to whom such well was sold, assigned, transferred, conveyed, or exchanged.

(b) The name and location of the well.

(c) The date of the sale, assignment, transfer, conveyance or exchange.

(d) The date when possession was relinquished by the owner or operator.

(e) A description of the land upon which the well is situated.

(Amended by Stats. 1976, Ch. 813.)

§ 3723. Every person who acquires the ownership or operation of any well, whether by purchase, transfer, assignment, conveyance, exchange, or otherwise, shall, within 30 days after acquiring the well and the land, owned or leased, upon which it is located, notify the supervisor or the district deputy, in writing, of his ownership or operation. The notice shall contain the following:

(a) The name and address of the person from whom the well was acquired.

(b) The name and location of the well.

(c) The date of acquisition.

(d) The date when possession was acquired.

(e) A description of the land upon which the well is situated.

(Amended by Stats. 1976, Ch. 813.)

§ 3723.5. Any person who acquires the ownership or operation of any well or wells, whether by purchase, transfer, assignment, conveyance, exchange, or otherwise, shall, within 30 days after acquiring the well or wells, file with the supervisor an individual indemnity bond in the sum of twenty-five thousand dollars ($25,000) for each well acquired, or a blanket indemnity bond in the sum of one hundred thousand dollars ($100,000) for any number of wells acquired. The bond shall be stated in substantially the language set forth in Section 3725.
(Amended by Stats. 1977, Ch. 112.)

§ 3724. The owner or operator of any well, before commencing the original drilling of a well or the redrilling of an abandoned well, shall file with the supervisor or the district deputy a written notice of intention to commence drilling, accompanied by the prescribed fee. 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 owner or operator written response to the notice within 10 working days, such failure shall be considered as an approval of the notice and the notice shall, for the purposes and intents of this chapter, be deemed a written report of the supervisor. The notice shall contain the following:

(a) The location and elevation of the floor of the proposed derrick.

(b) The number or other designation by which the well shall be known. Such number or designation shall be subject to the approval of the supervisor.

(c) The owner's or operator's estimate of the depths between which production will be attempted.

(d) Such other pertinent data as the supervisor may require.

After the completion of any well, the provisions of this section, other than the requirement of the payment of the fee, shall also apply, as far as may be, to the deepening or redrilling of the well, or 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 by which any well heretofore drilled has been known, 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.

As set forth by regulation, the appropriate fee to be filed for the drilling of a new well or the redrilling of an abandoned well, shall be twenty-five dollars ($25), two hundred dollars ($200), five hundred dollars ($500), or one thousand dollars ($1,000).

The fee shall be paid as provided in Section 3724.6.

(Amended by Stats. 1983, Ch. 375, Sec. 1.)

§ 3724.1. An owner or operator may submit to the supervisor for approval a written program to drill a shallow well or wells for temperature-gradient monitoring purposes. In order to qualify under this section, a program shall contain not more than 25 wells and the maximum total depth of each of these wells shall not exceed 250 feet. Each program submitted for approval shall include:

(a) Well numbers.

(b) Well locations and elevations.

(c) Geologic interpretation of the area under investigation, including any known or inferred temperature data.

(d) Such other data as may be required by the supervisor.

The fee required to be filed for the drilling of these shallow wells shall be twenty-five dollars ($25) per well or two hundred dollars ($200) per program, whichever is the lesser.

The fee shall be paid as provided in Section 3724.6.

(Amended by Stats. 1988, Ch. 1077, Sec. 14.)

§ 3724.2. If, after study by the supervisor, it is determined that one or all of the wells proposed pursuant to Section 3724.1 require additional supervision, the supervisor may require that a

proposal for such well or wells be submitted in compliance with all the provisions of Section 3724.
(Added by Stats. 1971, Ch. 1213.)

§ 3724.3. Drilling of program wells, as described in Section 3724.1, 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 owner or operator written response to the program within 10 working days, such failure shall be considered as an approval of the program and the program shall, for the purposes and intents of this chapter, be deemed a written report of the supervisor.
(Added by Stats. 1971, Ch. 1213.)

§ 3724.32. When an operator fails to pay a civil penalty imposed pursuant to Section 3754.5, comply with an order of the supervisor issued pursuant to this chapter, or pay a charge assessed under Section 3724.5, the supervisor may deny approval of the operator's proposed well operations until the operator pays the civil penalty, complies with the order of the supervisor, or pays the charge assessed under Section 3724.5.
(Added by Stats. 2009, Ch. 597, Sec. 1. Effective January 1, 2010.)

§ 3724.35. The supervisor may adopt regulations governing intermediate and deep wells drilled for temperature-gradient monitoring purposes. The regulations may specify the content of any written program for the wells drilled for that purpose to be submitted to the supervisor for approval, the amount of the fee, if any, to be filed for each intermediate or deep well drilled or for each program, and any other matter deemed necessary by the supervisor.
(Amended by Stats. 1988, Ch. 1077, Sec. 15.)

§ 3724.4. The proposal, and all other data submitted as required by Sections 3724.1, 3724.2, and 3724.3, shall be maintained in a confidential status as provided for in Section 3752.
(Added by Stats. 1971, Ch. 1213.)

§ 3724.5. To provide funds for the supervision of geothermal resource wells, the supervisor shall establish an annual well fee, and penalties for late payment, to be applied on an equal basis to all wells as provided under this section.

The annual well fee shall be imposed upon each producing, service, and idle well that existed at any time during the calendar year preceding the statewide fee-assessment date. However, the annual well fee shall not be imposed on any temperature-gradient or observation well, irrespective of its depth, and any low-temperature well, including any well drilled for the purpose of filling a hot water spa or pool intended for human immersion, or any well for which the supervisor has approved suspension.

The annual well fee shall be established so that the sum of the annual well fees plus the estimated sum of those well permit fees provided in Sections 3724 and 3724.1 and pursuant to

any regulation adopted under Section 3724.35 are equal to the appropriation for the supervision of geothermal resource wells as provided in the Governor's Budget. The establishment of the annual well fee shall take into account any budget adjustments for actual expenditures in the current and prior fiscal years. Any budget change proposal for support of the provisions of this chapter shall be submitted by the supervisor to geothermal operators for review and comment. A system for determining the fee and penalties and administering the fee and penalty collection shall be adopted by the supervisor by regulation after public hearing.
(Amended by Stats. 1988, Ch. 1077, Sec. 16.)

§ 3724.6. The permit application fees established in Sections 3724 and 3724.1 shall be made payable by the operator to the Department of Conservation, and the annual well fee established in accordance with Section 3724.5 shall be made payable to the Treasurer. The proceeds from the permit applications and the annual well fees shall be deposited in the Oil, Gas, and Geothermal Administrative Fund, and shall be available for appropriation exclusively for the supervision of geothermal resource wells.
(Amended by Stats. 2003, Ch. 240, Sec. 17. Effective August 13, 2003.)

§ 3725. Every person who engages in the drilling, redrilling, deepening, maintaining, or abandoning of any well, except a low-temperature geothermal well, shall file with the supervisor an individual indemnity bond in the sum of twenty-five thousand dollars ($25,000) for each well drilled, redrilled, deepened, maintained, or abandoned. The bond shall be filed with the supervisor at the time of the filing of the notice of intention to drill, redrill, deepen, maintain, or abandon, as provided in Section 3724 or 3724.1. The bond shall be executed by the person, as principal, and by an authorized surety company, as surety, conditioned that the principal named in the bond shall faithfully comply with all the provisions of this chapter, in drilling, redrilling, deepening, maintaining, or abandoning any well or wells covered by the bond, and shall secure the state against all losses, charges, and expenses incurred by it to obtain such compliance by the principal named in the bond.

The conditions of the bond shall be stated in substantially the following language:
"If ____, the above bounden principal, shall well and truly comply with all the provisions of Chapter 4 (commencing with Section 3700) of Division 3 of the Public Resources Code and shall obey all lawful orders of the State Oil and Gas Supervisor, or his or her district deputy or deputies, if not appealed as provided in that chapter, or upon affirmance thereof by the Director of Conservation, if appealed thereto, and shall pay all charges, costs, and expenses incurred by the supervisor or his or her 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 chapter, then this obligation shall be void; otherwise, it shall remain in full force and effect."
(Amended by Stats. 1984, Ch. 278, Sec. 12.)

§ 3725.5. Any person who engages in the drilling, redrilling, deepening, maintaining, or abandoning of any low-temperature well, as defined in Section 3703.1, shall file with the supervisor an individual indemnity bond in the sum of two thousand dollars ($2,000) for each well less than 2,000 feet deep, ten thousand dollars ($10,000) for each well 2,000 feet deep or deeper, but less than 5,000 feet deep, fifteen thousand dollars ($15,000) for each well 5,000 but less than 10,000 feet deep, or twenty-five thousand dollars ($25,000) for each well 10,000 or more feet deep. The bond shall be filed with the supervisor at the time of the filing of the notice of intention to drill, redrill, deepen, maintain, or abandon, as provided in Section 3724 or 3724.1. The bond shall be executed by such person, 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 3725, except as to the difference in the amount.
(Amended by Stats. 1978, Ch. 1270.)

§ 3726. Any person who engages in the drilling, redrilling, deepening, maintaining, or abandoning of one or more wells at any time, may file with the supervisor one bond for one hundred thousand dollars ($100,000) to cover all his operations in drilling, redrilling, deepening, maintaining, or abandoning of any of his wells in this state in lieu of an individual indemnity bond for each such operation as required by Section 3725 or 3725.5. The bond shall be executed by such person, 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 3725, except as to the difference in the amount.
(Amended by Stats. 1977, Ch. 112.)

§ 3728. Any individual or blanket indemnity bond issued in compliance with this chapter may, with the consent of the supervisor, be terminated and canceled and the surety be relieved of all obligations thereunder when the well or wells covered by such bond have been properly abandoned or another valid bond has been substituted therefor. Should the person who has filed a blanket bond properly abandon a portion of his wells covered by the bond, the bond may, with the consent of the supervisor, be terminated and canceled and the surety be relieved of all obligations thereunder upon the filing by such person of an individual bond for e ch well which he is still engaged in drilling, redrilling, deepening, maintaining, or abandoning. Liability as to individual wells that have been drilled and abandoned under a blanket bond may also be terminated with the consent of the supervisor.
(Amended by Stats. 1976, Ch. 794.)

§ 3728.5. In lieu of the bond required by Sections 3723.5, 3725, 3725.5, and 3726, 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.
(Amended by Stats. 1982, Ch. 517, Sec. 351.)

§ 3729. For the purposes of Section 3728, a well is properly abandoned when it has been shown to the satisfaction of the supervisor that all proper steps have been taken 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 the escape of all fluids to the surface.
(Amended by Stats. 1976, Ch. 794.)

§ 3730. 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.
(Added by Stats. 1965, Ch. 1483.)

§ 3731. The log shall show the character and depth of the formation passed through or encountered in the drilling of the well, the amount, size and weight of casing used, and particularly the location, depth and temperature of waterbearing strata, together with the temperature, chemical composition, and other chemical and physical characteristics of fluid encountered from time to time, so far as ascertained.
(Amended by Stats. 1967, Ch. 1398.)

§ 3732. The core record shall show the depth, character, and fluid content of cores obtained, so far as determined.
(Added by Stats. 1965, Ch. 1483.)

§ 3733. 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, the results of production and other tests during drilling operations, and completion data.
(Added by Stats. 1965, Ch. 1483.)

§ 3734. 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 board, the supervisor, or the district deputy.
(Amended by Stats. 1976, Ch. 1073.)

§ 3735. Upon the completion or abandonment of any well or upon the suspension of operations upon any well, true copies of the log, core record, history, and, if made, true copies of all electrical, physical, or chemical logs, tests, or surveys, in duplicate and in such form as the supervisor may direct, shall be filed with the district deputy within 60 days after such completion or abandonment. Like copies shall be filed upon the recompletion of any well.
(Amended by Stats. 1971, Ch. 1213.)

§ 3736. 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.
(Amended by Stats. 1976, Ch. 1073.)

§ 3737. A well is completed, for the purposes of this chapter, 30 days after it has commenced to produce a geothermal resource unless drilling operations are resumed before the end of the 30-day period.
(Amended by Stats. 1971, Ch. 1213.)

§ 3739. Any person engaged in operating any wells wherein high pressures are known to exist, and any person drilling for geothermal resources in any district where the pressures are 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 reasonable effort and endeavor effectually to prevent blowouts, explosions, and fires.
(Amended by Stats. 1967, Ch. 1398.)

§ 3740. The owner or operator of any well on lands producing or reasonably presumed to contain geothermal resources shall properly case it with watertight and adequate casing, in accordance with methods approved by the supervisor or the district deputy. The owner or operator shall also use every reasonable effort and endeavor to prevent damage to life, health, property, and natural resources, to shut out detrimental substances from strata containing water suitable for irrigation or domestic purposes and from surface water suitable for such purposes, and to prevent the infiltration of detrimental substances into such strata and into such surface water.
(Amended by Stats. 1970, Ch. 117.)

§ 3741. The supervisor shall require such tests or remedial work as in his judgment are necessary to prevent damage to life, health, property, and natural resources, to protect geothermal resources deposits from damage, or to prevent the infiltration of detrimental substances into underground or surface water suitable for irrigation or domestic purposes, to the best interests of the neighboring property owners and the public.
(Amended by Stats. 1970, Ch. 117.)

§ 3742.2. Any person having drilled a well or wells on state, federal or private lands which are producing or, according to the supervisor, are capable of producing geothermal resources, may, at any time, apply to the supervisor for a certificate of primary purpose. When the supervisor determines that such well or wells are primarily for the purpose of producing geothermal resources and not for the purpose of producing water usable for domestic and irrigation purposes, the supervisor shall issue a certificate of primary purpose to such person. Such

certificate shall establish a rebuttable presumption that such person has absolute title to the geothermal resources reduced to his possession from such well or wells. Such presumption may be rebutted only upon a showing that the water content of the geothermal resources is useful for domestic or irrigation purposes without further treatment thereof, but not by virtue of any production of such water as a by-product incident to the production of the geothermal resources.
(Amended by Stats. 1983, Ch. 369, Sec. 6.)

§ 3743. (a) An order of the supervisor or a district deputy issued pursuant to this chapter shall provide a clear and concise recitation of the acts or omissions with which the operator is charged. The order shall state all penalties and requirements imposed on the operator in connection with the acts or omissions charged and the order shall provide citations to the provisions of this code and the regulations that support the imposition of the penalties and requirements.

(b) An order of the supervisor or a district deputy shall be in writing and shall be served on the operator by personal service or by certified mail.

(c) When the supervisor or a district deputy makes or gives any written direction concerning the drilling, testing, or other operations in any well drilled, in process of drilling, or being abandoned, and the operator, owner, or representative of either, serves written notice, either personally or by mail, addressed to the supervisor, or to the district deputy at his or her office in the district, requesting that a definite order be made upon the subject, the supervisor or the district deputy shall, within five days after receipt of the notice, deliver a final written order on the subject matter.

(d) When the supervisor or a district deputy issues any written order concerning an operation, an appeal may be made from the order pursuant to Sections 3762 to 3768, inclusive. The order shall inform the operator of its right to appeal the order.
(Amended by Stats. 2010, Ch. 264, Sec. 17. Effective January 1, 2011.)

§ 3744. (a) Within 30 days from the date of service of an order made pursuant to Section 3743, 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 the affirmance of the order, the 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 constitutes a lien against the real or personal property of the operator upon which the work is done and the lien has the force, effect, and priority of a judgment lien pursuant to Section 3772.

(b) Notwithstanding Section 3741, 3743, or 3755, if the supervisor determines that an emergency exists, the supervisor may make formal or emergency orders or undertake any other action that the supervisor determines to be necessary for the protection of life, health, property, or natural resources.
(Amended by Stats. 2010, Ch. 264, Sec. 18. Effective January 1, 2011.)

§ 3745. The owner of any well producing geothermal resources or injecting fluids associated with geothermal operations shall file with the supervisor, on or before the 30th day of each month, for the last preceding calendar month, a statement of production and injection in the form as the supervisor may designate.
(Amended by Stats. 1988, Ch. 1077, Sec. 17.)

§ 3746. Before abandoning any well in accordance with methods approved by the supervisor or the district deputy, and under his direction, the owner or operator shall use every reasonable effort and endeavor to protect any underground or surface water suitable for irrigation or domestic purposes from the infiltration or addition of any detrimental substances.
(Added by Stats. 1965, Ch. 1483.)

§ 3747. Before any work is commenced to abandon any well, the owner or operator shall give written notice to the supervisor or the district deputy of the owner's or operator's intention to abandon the well and the date upon which the work of abandonment will begin.

The notice shall be given at least 10 days before the proposed abandonment, and it shall show the condition of the well and the proposed method of abandonment.

The owner or operator shall furnish the supervisor or the district deputy any additional information that the supervisor or the district deputy may request regarding the condition of the well and the proposed method of abandonment, at any time between the filing of the notice of intention to abandon the well and the completion of abandonment.
(Amended by Stats. 1988, Ch. 1077, Sec. 18.)

§ 3748. The supervisor, or the district deputy, shall before the proposed date of commencing work to abandon such well, furnish to the owner or operator either:

(a) A written report of approval of the proposal.

(b) A written report stating what work or tests will be necessary before approval of abandonment will be given.

(c) A written request stating what information will be necessary for the owner or operator to furnish the supervisor or the district deputy before approval to commence work to abandon or before approval of abandonment will be given.
(Added by Stats. 1965, Ch. 1483.)

§ 3749. If the supervisor or the district deputy fails to give the owner or operator a written report or request within the specified time, such failure shall be considered as an approval of the proposal to abandon the well, and the proposal shall, for the purposes and intents of this chapter, be deemed a written report of the supervisor or the district deputy.
(Added by Stats. 1965, Ch. 1483.)

§ 3750. Within 60 days after the completion of abandonment of any well, the owner or operator of the well shall make, in such form as the supervisor or the district deputy may direct, a written report of all work done in connection with the abandonment. The supervisor or the district deputy shall, within 10 days after the receipt of a written report of completion, 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 inspector, or failure to furnish the supervisor or the district deputy, at his request, with any information regarding the condition of the well, shall constitute sufficient grounds for disapproval of the abandonment.
(Amended by Stats. 1981, Ch. 741, Sec. 22.)

§ 3751. No person, whether as principal, agent, servant, employee, or otherwise, shall remove the casing or any portion thereof, from any well without first giving written notice to the supervisor or the district deputy of the person's intention to remove the casing from the well. The notice shall be given at least 10 days before the proposed removal.

The supervisor or the district deputy shall, before the proposed date of removal, furnish the person with a written report of approval of the person's proposal, or a written report stating what work shall be done before the approval will be given.

If the supervisor or the district deputy fails to give the person a written report within the specified time, that failure shall be considered an approval of the proposal to remove the casing, and the proposal shall, for the purposes and intents of this chapter, be deemed a written report of the supervisor or the district deputy.
Within five days after the completion of the removal, the person shall make, in the form as the supervisor or district deputy may direct, a written report, in duplicate, of all work done in connection with the removal.
(Amended by Stats. 1988, Ch. 1077, Sec. 19.)

§ 3752. (a) (1) Except as otherwise provided in this section, all the well records, including production records, of an owner or operator that 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 as confidential information. The confidential period shall not exceed five years from the cessation of drilling operations as specified in subdivision (e).

(3) Well records that are maintained as confidential information by the division shall be open to inspection by those persons whom the owner or operator authorizes 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. 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 subdivision (a), the well records shall become public records when the supervisor is notified that the lease has expired or terminated.

(c) Production reports filed pursuant to Section 3745 shall be open to inspection by the State Board of Equalization or its duly appointed representative 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 3745 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.

(e) For purposes of this section, the cessation of drilling operations occurs on the date of removal of drilling machinery from the well site.

(Amended by Stats. 2007, Ch. 254, Sec. 4. Effective September 26, 2007.)

§ 3753. Upon receipt by the supervisor or by a district deputy of a written complaint, alleging a condition in violation of this chapter, specifically setting forth the condition complained against, signed by the complainant, the supervisor shall make an investigation of the well or wells and make a written report and order, stating the work required to repair the damage complained of, or stating that no work is required.

A copy of the order shall be delivered to the complainant, or if more than one, to each complainant, and, if the supervisor orders the damage repaired a copy of the order shall be delivered to each of the owners, operators, or agents having in charge the well or wells upon which the work is to be done.

The order shall contain a statement of the conditions sought to be remedied or repaired and a statement of the work required by the supervisor to repair the condition. Service shall be made by mailing copies to such persons at the post office address given.

(Amended by Stats. 1983, Ch. 369, Sec. 9.)

§ 3754. Any owner or operator, or employee thereof, who refuses to permit the supervisor or the district deputy, or his or her inspector, to inspect a well or appurtenant facilities, or who willfully hinders or delays the enforcement of this chapter, and every person, whether as principal, agent, servant, employee, or otherwise, who violates, fails, neglects, or refuses to

comply with this chapter, or who fails or neglects or refuses to furnish any report or record which may be required pursuant to this chapter, or who willfully renders a false or fraudulent report, is guilty of a misdemeanor, punishable by a fine of not less than one hundred dollars ($100), nor more than one thousand dollars ($1,000), or by imprisonment for not exceeding six months, or by both the fine and imprisonment, for each offense.
(Amended by Stats. 1988, Ch. 1077, Sec. 20.)

§ 3754.5. (a) Any person who violates this chapter or any regulation implementing this chapter is subject to a civil penalty not to exceed five thousand dollars ($5,000) for each violation. Acts of God, and acts 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 upon a determination that a violation has been committed by the person charged, following notice to the person and an opportunity to be heard. 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 amount of civil liability pursuant to this section, the supervisor shall consider, in addition to other relevant circumstances, (1) the extent of harm caused by the violation, (2) the persistence of the violation, and (3) the number of prior violations by the same violator.

(b) An order of the supervisor imposing a civil penalty shall be reviewable pursuant to Sections 3762 to 3771, inclusive. When the order of the supervisor has become final or has been upheld following exhaustion of the applicable review procedures, the supervisor may apply to the appropriate superior court for an order directing payment of the civil penalty.

(c) Any amount collected under this section shall be deposited in the Oil, Gas, and Geothermal Administrative Fund.
(Amended by Stats. 2003, Ch. 240, Sec. 18. Effective August 13, 2003.)

§ 3755. The supervisor or his deputy may order the abandonment of any well that has been deserted whether or not any damage is occurring or threatened by reason of said well. Suspension of drilling operations and removal of drilling machinery is prima facie evidence of desertion after the elapse of six months unless a request for an extension of time for a period not to exceed an additional six months is theretofore filed. At any time the supervisor may for good cause shown extend this period.
(Added by Stats. 1965, Ch. 1483.)

§ 3756. Whenever the supervisor finds that it is in the interest of the protection of geothermal resources from unreasonable waste, the lessors, lessees, operators, or other persons owning or controlling royalty or other interests in the separate properties of the same producing or prospective geothermal resources area, may, with the approval of the supervisor, enter into agreements for the purpose of bringing about the cooperative development and operation of all or a part or parts of the area, or for the purpose of bringing about the development or operation of all or a part or parts of such area as a unit, or for the purpose of fixing the time, location, and manner of drilling and operating of wells for the production of geothermal resources. Any such agreement shall bind the successors and assigns of the parties thereto in land affected thereby

and shall be enforceable in an action for specific performance. No such agreement when approved by the supervisor hereunder shall be held to violate any of the statutes of this state prohibiting monopolies or acts, arrangements, agreements, contracts, combinations, or conspiracies in restraint of trade or commerce.
(Amended by Stats. 1983, Ch. 369, Sec. 10.)

§ 3757. Any well hereafter drilled for the discovery and production of geothermal resources, 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 road or street or highway dedicated prior to the commencement of drilling of the well, is a public nuisance.
(Amended by Stats. 1967, Ch. 1398.)

§ 3757.1. Notwithstanding any other provisions of this chapter, where a parcel of land contains one acre or more and all or substantially all of the surface is unavailable for the location of a geothermal well and directional drilling is found by the supervisor to be necessary, the supervisor may approve proposals to drill wells at whatever locations the supervisor determines to be advisable for the purpose of properly developing the geothermal resources except, that no well shall be drilled or permitted to produce which is located within 25 feet of the outer boundary of the parcel of land on which the well is situated or within 25 feet of a public road, street, or highway dedicated prior to the commencement of drilling. The supervisor may require, at the time the supervisor gives approval of the notice of intention to drill, redrill, or deepen such well, that a subsurface directional survey be made, and that the survey be filed with the supervisor within 15 days of cessation of drilling operations.
(Amended by Stats. 1988, Ch. 1077, Sec. 21.)

§ 3757.2. For the purpose of developing low-temperature geothermal resources, the supervisor may approve the exemption of any low-temperature geothermal well from Sections 3721, 3722, 3723, 3723.5, 3725.5, and 3745, if the resource is used domestically or in a noncommercial manner. The supervisor may also approve the drilling of low-temperature geothermal wells at whatever locations he deems advisable, if no well is drilled or permitted to produce which is located within 15 feet of the outer boundary of the parcel of land on which the well is situated or within 15 feet of a public road, street, or highway dedicated prior to the commencement of drilling.
(Amended by Stats. 1984, Ch. 393, Sec. 3. Effective July 11, 1984.)

§ 3758. Where several contiguous parcels of land in one or different ownerships are operated as a single geothermal resources 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.
(Amended by Stats. 1967, Ch. 1398.)

§ 3759. For the purpose of this chapter, an alley which intersects or lies within any block or other subdivision unit is not a public street or road.
(Added by Stats. 1965, Ch. 1483.)

§ 3760. Each day in which the drilling of any well is carried on, or on which it is permitted to produce geothermal resources in violation of this chapter is a separate nuisance.
(Amended by Stats. 1967, Ch. 1398.)

§ 3761. The provisions regarding the location of geothermal resources wells do not apply to any wells producing geothermal resources on the effective date of this act.
(Amended by Stats. 1967, Ch. 1398.)

§ 3762. (a) The operator of a well to whom the supervisor or district deputy has issued an order pursuant to this chapter may file a notice of appeal to the director from that order. The notice of appeal shall be in writing and shall be filed with the supervisor or with the district deputy who issued the order. The operator shall file the appeal within 10 days of the service of the order. Failure of the operator to file an appeal from the order within the 10-day period shall be a waiver by the operator of its rights to challenge the order. If the order is served by mail, the time for responding shall be determined as provided in Section 1013 of the Code of Civil Procedure.

(b) (1) The filing of a written notice of appeal shall operate as a stay of the order, except when an order for remedial work is issued as an emergency order pursuant to Section 3744. If the order is an emergency order, the operator shall immediately perform whatever work is required by the order to alleviate the emergency or shall permit the agents appointed by the supervisor to perform that work.

(2) If the emergency order is set aside or modified on appeal, the supervisor shall refund the reasonable costs incurred by the operator for whatever work is not required by the set-aside or modified order or shall not impose costs for work performed by the supervisor or the supervisor's agents if the work is excluded from the modified order or the order is set aside.

(3) (A) The costs to be refunded pursuant to paragraph (2) by the supervisor shall be determined in a hearing before the director after the exhaustion of appeals. The operator shall have the burden of proving the amount of costs to be refunded.

(B) A determination by the director as to the amount of costs to be refunded pursuant to paragraph (2) may be appealed by the operator pursuant to subdivision (a) of Section 3354.

(4) If the operator believes that it will be irretrievably injured by the performance of the work required to alleviate the emergency pending the outcome of the appeal, the operator may seek an order from the appropriate superior court restraining the enforcement of the order pending the outcome of the appeal.
(Repealed and added by Stats. 2010, Ch. 264, Sec. 20. Effective January 1, 2011.)

§ 3763. (a) A hearing shall be provided in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code only in an appeal from an order in the following circumstances:

(1) Issued pursuant to a Section 3755 finding that the operator's wells are deserted and should be plugged and abandoned.

(2) Rescinding an injection project approval for a project that has already commenced.

(b) An order issued pursuant to Section 3743 shall satisfy the requirement of Section 11503 of the Government Code that an accusation be filed.

(c) For an appeal of an order that is not described in subdivision (a), a hearing shall be conducted by the director in accordance with Sections 3764 and 3765.

(d) For an appeal of an order that is described in subdivision (a) and is also an emergency order for remedial work, a hearing shall be conducted by the director in accordance with Sections 3764 and 3765 for the limited purpose of considering the emergency order for remedial work. All other penalties and requirements imposed by the order shall be considered at a hearing provided in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

(Added by Stats. 2010, Ch. 264, Sec. 21. Effective January 1, 2011.)

§ 3764. (a) A hearing conducted by the director shall adhere to the following:

(1) When an order is not issued as an emergency order, within 30 days from the date of the service of the notice of appeal, the director shall provide to the operator notice of the time and place of the hearing. The hearing shall take place within 30 days after the date of the director's notice. The notice shall inform the operator that the director may extend the date of the hearing for up to 60 days for good cause upon application of the operator or the supervisor.

(2) When an order has been issued as an emergency order, within 10 days from the date of the service of the notice of appeal, the director shall provide to the operator notice of the time and place of the hearing. The hearing shall take place within 20 days after the date of the director's notice. The notice shall inform the operator that the director may extend the date of the hearing for up to 30 days for good cause upon application of the operator or the supervisor.

(b) The director shall conduct the hearing within the district where the majority of the wells that are the subject of the order are located, or the hearing may be conducted at a location outside of that district upon application of the operator. The hearing shall be reported by a stenographic reporter and may, in addition, be electronically recorded by either party.

(c) The notice of hearing shall inform the operator of its right to file a written answer to the charges no later than 10 days before the date of the hearing. The notice also shall inform the operator that it has the right to present oral and documentary evidence at the hearing.

(d) Upon a verified and timely petition of the operator, the director may order the testimony of a witness at the hearing. The petition shall be served upon the director and the other party within five days after the filing of an appeal and shall set forth the name and address of the witness whose testimony is requested, to the extent known; a showing of the materiality of the testimony; and a showing that the witness cannot be compelled to testify absent an order of the director. The supervisor may file an opposition to the petition within five days after the petition is

served. The director shall either deny or grant the petition within 10 days after receipt of the petition and receiving any opposition to the petition. Upon granting a petition, the director shall issue a subpoena pursuant to Section 3357 compelling the testimony of the witness at the hearing.

(e) The director may convert a hearing pursuant to this section to a formal hearing conducted in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code in any of the following circumstances:

(1) The operator makes a showing satisfactory to the director that the order being appealed is likely to result in termination of an established oil or gas producing or injection operation.

(2) It appears to the director that the hearing will involve complex evidentiary or procedural issues that will cause more than minimal delay or burdens.

(3) The operator and the supervisor agree and stipulate to convert the hearing to a formal hearing.

(f) The conversion of a hearing pursuant to this section to a formal hearing shall be conducted in accordance with Article 15 (commencing with Section 11470.10) of Chapter 4.5 of Part 1 of Division 3 of Title 2 of the Government Code.

(Repealed and added by Stats. 2010, Ch. 264, Sec. 23. Effective January 1, 2011.)

§ 3765. (a) Within 30 days after the close of a hearing conducted by the director, the director shall issue a written decision affirming, setting aside, or modifying the order from which the appeal was taken. The director's written decision shall be based upon the preponderance of the evidence and shall set forth the director's factual findings, legal conclusions, and rationale for the result. The director may extend the 30-day period for issuing the written decision if the extension is agreed to by the operator.

(b) The director shall file the written decision with the supervisor and serve it on the operator as soon as the decision is complete, at which time the decision shall be deemed final. The director's decision shall supersede the order of the supervisor from which the appeal was made. If the director affirms or modifies the order, the director shall retain jurisdiction until the operator completes the work required to be performed by the order.

(Repealed and added by Stats. 2010, Ch. 264, Sec. 25. Effective January 1, 2011.)

§ 3766. (a) Following a hearing conducted by the director pursuant to Sections 3764 and 3765 or subdivision (b) of Section 3762, the operator may obtain judicial review of the decision of the director by filing a petition for writ of administrative mandamus in the superior court of the county where the division's district office from which the order was issued is located. The operator shall file the petition within 30 days after the date the operator was served with the decision.

(b) Following a hearing conducted in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code, the operator may obtain judicial review of the decision pursuant to Section 11523 of the Government Code.

(Repealed and added by Stats. 2010, Ch. 264, Sec. 27. Effective January 1, 2011.)

§ 3767. When an operator seeks judicial review of a decision of the director, including a decision following a hearing conducted in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code, the court shall hear the cause on the record before the director or an administrative law judge. New or additional evidence shall not be introduced in court. The court's inquiry shall extend to whether the director acted without or in excess of jurisdiction, whether there was a fair hearing, and whether there is any prejudicial abuse of discretion. Abuse of discretion is established if the administrative proceeding has not been conducted in the manner required by law, the decision is not supported by the findings, or the findings are not supported by substantial evidence in light of the whole record.
(Repealed and added by Stats. 2010, Ch. 264, Sec. 29. Effective January 1, 2011.)

§ 3768. If the operator does not appeal an order, if the operator does not timely seek judicial review of a decision affirming or modifying an order within the time provided in Section 3766, or if the operator has timely sought and obtained judicial review and the court has affirmed the decision, then any charge, including penalty and interest, that the decision permits the supervisor to impose on the operator for work performed by the supervisor or the supervisor's agents shall constitute a state tax lien against the real and personal property of the operator pursuant to Section 3772.
(Repealed and added by Stats. 2010, Ch. 264, Sec. 31. Effective January 1, 2011.)

§ 3769. In any proceeding instituted by the supervisor for the purpose of enforcing or carrying out the provisions of this chapter, or for the purpose of holding an investigation to ascertain the condition of any well or wells complained of, or which in the opinion of the supervisor may reasonably be presumed to be improperly located, drilled, operated, maintained, or conducted, the supervisor shall have the power to administer oaths and may apply to a judge of the superior court of the county in which the proceeding or investigation is pending, for a subpoena for witnesses to attend the proceeding or investigation. Upon the application of the supervisor, the judge of the superior court shall issue a subpoena directing the witness to attend the proceeding or investigation, and such person shall be required to produce, when directed, all records, surveys, documents, books, or accounts in the witness' custody or under the witness' control; except that no person shall be required to attend upon such proceeding, unless the person resides within the same county or within 100 miles of the place of attendance.

The supervisor may in such case cause the depositions of witnesses residing within or without the state to be taken in the manner prescribed by law for like depositions in civil actions in superior courts of this state under Title 4 (commencing with Section 2016.010) of Part 4 of the Code of Civil Procedure, and may, upon application to a judge of the superior court of the county within which the proceeding or investigation is pending, obtain a subpoena compelling the attendance of witnesses and the production of records, surveys, documents, books, or accounts at such places as the judge may designate within the limits prescribed in this section.

(Amended by Stats. 2004, Ch. 182, Sec. 56. Effective January 1, 2005. Operative July 1, 2005, by Sec. 64 of Ch. 182.)

§ 3770. Witnesses shall be entitled to receive the fees and mileage fixed by law in civil causes, payable from the Oil, Gas, and Geothermal Administrative Fund.
(Amended by Stats. 2003, Ch. 240, Sec. 19. Effective August 13, 2003.)

§ 3771. In case of the failure or neglect on the part of any person to comply with any order of the supervisor or the director, or any subpoena, or upon the refusal of any witness to testify to any matter regarding which the person may lawfully be interrogated, or upon refusal or neglect to appear and attend at any proceeding or hearing on the day specified, after having received a written notice of not less than 10 days prior to the proceeding or hearing, or upon the person's failure, refusal or neglect to produce books, papers, or documents as demanded in the order or subpoena upon that day, that failure, refusal or neglect constitutes a misdemeanor. Each day's further failure, refusal, or neglect is a separate and distinct offense.
The district attorney of the county in which the proceeding, hearing, or investigation is to be held, shall prosecute any person guilty of violating this section by continuous prosecution until the person appears or attends or produces the books, papers, or documents, or complies with the subpoena or order of the supervisor or the director.
(Amended by Stats. 1984, Ch. 278, Sec. 13.)

§ 3772. (a) If any person fails to pay any charge or penalty imposed under this chapter at the time that it becomes due and payable, the amount thereof, including penalties and interest, together with any costs in addition thereto, shall thereupon be a perfected and enforceable state tax lien. Such a lien is subject to Chapter 14 (commencing with Section 7150) of Division 7 of Title 1 of the Government Code.

(b) For the purpose of this section only, "due and payable" means the date a return is required to be filed, without regard to any extension of time, without payment of the amount due or the date a determination or assessment made under this chapter becomes final, whichever is applicable.
(Amended by Stats. 1980, Ch. 600, Sec. 12.)

§ 3772.2. A warrant may be issued by the Controller or his or her duly authorized representative for the collection of any charges, interests and penalty and for the enforcement of any such lien directed to the sheriff and shall have the same effect as a writ of execution. It may and shall be levied and sale made pursuant to it in the same manner and with the same effect as a levy of and a sale pursuant to a writ of execution.
(Amended by Stats. 1996, Ch. 872, Sec. 129. Effective January 1, 1997.)

§ 3772.4. The sheriff shall receive, upon the completion of his or her services pursuant to a warrant, and the Controller is authorized to pay to him or her the same fees and commissions and expenses in connection with services pursuant to the warrant as are provided by law for

similar services pursuant to a writ of execution; provided, that fees for publication in a newspaper shall be subject to approval by the Controller rather than by the court; the fees, commissions and expenses shall be an obligation of the person or persons liable for the payment of those charges and may be collected from such person or persons by virtue of the warrant or in any other manner provided in this chapter for the collection of those charges.
(Amended by Stats. 1996, Ch. 872, Sec. 130. Effective January 1, 1997.)

§ 3772.6. In the event that the lien of the charges, penalties or interest attaches to real property from which geothermal energy is extracted and more than one parcel of property is included within the lien, the Controller may release by certificate pursuant to Section 7174 of the Government Code from the lien of such charges, interest, and penalties and costs, upon payment by the owner of any parcel or parcels of property of his proportionate share of the charges.
(Amended by Stats. 1980, Ch. 600, Sec. 13.)

§ 3773. The Controller shall, on or before the 90th day following the delinquency of any charge, bring an action in the name of the people of the state, in the county in which the property involved in the order is situated, to collect any delinquent charges, together with any penalties or costs, which have not been paid.
(Added by Stats. 1965, Ch. 1483.)

§ 3774. The Attorney General shall commence and prosecute any such action to final judgment.
(Amended by Stats. 2018, Ch. 349, Sec. 7. (AB 3257) Effective January 1, 2019.)

§ 3775. In such actions the record of charges, or a copy of so much thereof as is applicable, duly certified by the Controller, showing unpaid charges against any person, is prima facie evidence of the charges, the delinquency, the amount of charges, penalties, and costs due and unpaid, that the person is indebted to the people of the State of California in the amount of charges and penalties therein appearing unpaid, and that all forms of law in relation to the charges have been complied with.

The provisions of the Code of Civil Procedure relating to service of summons, pleadings, proofs, trials, and appeals are applicable to the proceedings.
(Amended by Stats. 1977, Ch. 579.)

§ 3776. Payment of the penalties and charges, or the amount of the judgment recovered in the action, shall be made to the State Treasurer, and shall be returned and credited to the Oil, Gas, and Geothermal Administrative Fund.
(Amended by Stats. 2003, Ch. 240, Sec. 20. Effective August 13, 2003.)

CHAPTER 5. Oil sumps

§ 3780. As used in this chapter, an “oil sump” is any open depression or basin in the ground, whether manmade or natural, which contains oil or a combination of oil and water.
(Added by Stats. 1973, Ch. 1076.)

§ 3781. The Legislature hereby finds and declares that it is essential in order to protect the wildlife resources of California that all hazardous exposed oil sumps in this state be either screened or eliminated.
(Amended by Stats. 1974, Ch. 772.)

§ 3782. The supervisor shall promulgate rules and regulations for the adequate screening of oil sumps to protect wildlife and shall order the closure of any oil and gas production operation maintaining an exposed or inadequately screened oil sump in violation of such rules and regulations.
(Added by Stats. 1973, Ch. 1076.)

§ 3783. Whenever the supervisor receives notification from the Department of Fish and Game pursuant to subdivision (a) of Section 1016 of the Fish and Game Code that an oil sump is hazardous to wildlife, he shall forthwith given written notice of such hazardous condition to the owner, lessee, operator, or person responsible for the existence of the condition and set forth the hazardous conditions as specified by the Department of Fish and Game. The owner, lessee, operator, or person responsible shall, within 30 days from the date of such notification, or such longer period as may be mutually agreed upon by the supervisor, the Department of Fish and Game, and the owner, lessee, operator, or person responsible, clean up or abate the condition to the satisfaction of the supervisor and the Department of Fish and Game. If the owner, lessee, operator, or person responsible does not clean up or abate the condition to the satisfaction of the supervisor and the Department of Fish and Game within the required period of time, the supervisor shall forthwith order the closure of the oil and gas production operation maintaining the oil sump.
(Amended by Stats. 1974, Ch. 772.)

§ 3784. Whenever the supervisor receives notification from the Department of Fish and Game pursuant to subdivision (b) of Section 1016 of the Fish and Game Code that an oil sump constitutes an immediate and grave danger to wildlife, he shall forthwith give written notice of such immediately dangerous condition to the owner, lessee, operator, or person responsible for the existence of the condition and set forth the immediately dangerous condition as specified by the Department of Fish and Game. The owner, lessee, operator, or person responsible shall, within 10 days from the date of such notification, or such longer period as may be mutually agreed upon pursuant to Section 3784.5 by the supervisor, the Department of Fish and Game, and the owner, lessee, operator, or person responsible, clean up or abate the condition to the satisfaction of the supervisor and the Department of Fish and Game. If the owner, lessee,

operator, or person responsible does not clean up or abate the condition to the satisfaction of the supervisor and the Department of Fish and Game within the required period of time, the supervisor shall forthwith order the closure of the oil and gas production operation maintaining the oil sump.
(Amended by Stats. 1974, Ch. 772.)

§ 3784.5. Extension of the 10-day period specified in Section 3784 may be granted only in cases where the supervisor and the Department of Fish and Game have determined that screening or elimination of the oil sump cannot be reasonably accomplished within 10 days.
(Added by Stats. 1973, Ch. 1076.)

§ 3785. The supervisor and the Department of Fish and Game shall develop a joint program to coordinate their respective responsibilities under this chapter and Section 1016 of the Fish and Game Code to protect the wildlife resources of the state from the hazards of exposed oil sumps.
(Added by Stats. 1973, Ch. 1076.)

§ 3787. No provision of this chapter shall be construed as a limitation on the authority and responsibilities of the supervisor with respect to the enforcement or administration of any provision of state law which he is authorized or required to enforce or administer.
(Added by Stats. 1973, Ch. 1076.)

CHAPTER 7. Methane Gas Hazards Reduction

Article 1. General Provisions

§ 3850. This chapter shall be known and may be cited as the Methane Gas Hazards Reduction Act.
(Added by Stats. 1987, Ch. 1322, Sec. 3.)

§ 3851. The Legislature finds and declares that methane gas hazards, as identified in the study conducted pursuant to Chapter 4.1 (commencing with Section 3240) of Chapter 1, are a clear and present threat to public health and safety.
(Added by Stats. 1987, Ch. 1322, Sec. 3.)

§ 3852. The Legislature further finds and declares that, due to the cost and complexity of methane hazard mitigations, property owners and local governments are often unable to mitigate these hazards.
(Added by Stats. 1987, Ch. 1322, Sec. 3.)

§ 3853. The Legislature further finds and declares, therefore, that it is essential that the state, in cooperation with local governments, provide funds to mitigate many of the state's methane gas hazards.
(Added by Stats. 1987, Ch. 1322, Sec. 3.)

Article 2. Definitions

§ 3855. As used in this chapter:

(a) "Methane gas hazards" means collections of biogenic or thermogenic gases identified as hazards in the study conducted by the supervisor pursuant to Article 4.1 (commencing with Section 3240) of Chapter 1.

(b) "Eligible jurisdictions" means counties and cities identified as having methane gas hazards in the study conducted by the supervisor pursuant to Article 4.1 (commencing with Section 3240) of Chapter 1.
(Added by Stats. 1987, Ch. 1322, Sec. 3.)

Article 3. Methane Gas Hazards Reduction Assistance

§ 3860. The director may award grants to eligible jurisdictions for purposes of planning, equipment purchases, installation, and other measures related to the mitigation of methane gas hazards. Ongoing maintenance and monitoring activities shall not be financed by grants pursuant to this chapter.
(Added by Stats. 1987, Ch. 1322, Sec. 3.)

§ 3861. Prior to receiving grants under this chapter, each eligible jurisdiction shall submit a report to the director describing how the funds are to be expended. Before submitting the report, each eligible jurisdiction shall provide opportunities for the public to review and comment on the report, and shall hold at least one public hearing on the report.
(Added by Stats. 1987, Ch. 1322, Sec. 3.)

§ 3862. Prior to receiving any grants pursuant to this chapter, an eligible jurisdiction shall do all of the following:

(a) Implement a zoning ordinance for areas containing methane gas hazards that establishes a methane gas hazard overlay and provides mandatory studies and mitigations for new construction within the overlay zones.

(b) Revise the safety element of the city or county general plan to illustrate the methane gas hazard areas and establish mitigative policies.

(c) Prepare a methane gas hazard mitigation plan, which provides strategies and mitigations for reducing existing methane gas hazards and for avoiding further hazards due to new

construction. The plans shall be consistent with the grant report, the zoning ordinance, and the general plan safety element.
(Added by Stats. 1987, Ch. 1322, Sec. 3.)

§ 3863. The department shall adopt rules and regulations implementing the grant program authorized by this chapter.
(Added by Stats. 1987, Ch. 1322, Sec. 3.)

Article 4. Methane Gas Hazard Reduction Account

§ 3865. The Methane Gas Hazard Reduction Account in the General Fund is hereby created. The moneys in the account shall be available for purposes of this chapter upon appropriation therefor by the Legislature.
(Added by Stats. 1987, Ch. 1322, Sec. 3.)

Article 5.5. Geothermal Resources

§ 6903. For the purposes of this chapter, “geothermal resources” shall mean the natural heat of the earth, the energy, in whatever form, below the surface of the earth present in, resulting from, or created by, or which may be extracted from, such natural heat, and all minerals in solution or other products obtained from naturally heated fluids, brines, associated gases, and steam, in whatever form, found below the surface of the earth, but excluding oil, hydrocarbon gas or other hydrocarbon substances.
(Added by Stats. 1967, Ch. 1398.)

DIVISION 13. Environmental Quality

CHAPTER 2.5 Definitions

§ 21065.5. “Geothermal exploratory project” means a project as defined in Section 21065 composed of not more than six wells and associated drilling and testing equipment, whose chief and original purpose is to evaluate the presence and characteristics of geothermal resources prior to commencement of a geothermal field development project as defined in Section 65928.5 of the Government Code. Wells included within a geothermal exploratory project must be located at least one-half mile from geothermal development wells which are capable of producing geothermal resources in commercial quantities.
(Added by Stats. 1978, Ch. 1271.)

§ 21067. "Lead agency" means the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment.
(Added by Stats. 1972, Ch. 1154.)

CHAPTER 2.6. General

§ 21090.1. For all purposes of this division, a geothermal exploratory project shall be deemed to be separate and distinct from any subsequent geothermal field development project as defined in Section 65928.5 of the Government Code.
(Added by Stats. 1978, Ch. 1271.)

DIVISION 20. California Coastal Act

CHAPTER 3. Coastal Resources Planning and Management Policies

Article 7. Industrial Development

§ 30260. Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.
(Added by Stats. 1976, Ch. 1330.)

§ 30262. (a) Oil and gas development shall be permitted in accordance with Section 30260, if the following conditions are met:

(1) The development is performed safely and consistent with the geologic conditions of the well site.

(2) New or expanded facilities related to that development are consolidated, to the maximum extent feasible and legally permissible, unless consolidation will have adverse environmental consequences and will not significantly reduce the number of producing wells, support facilities, or sites required to produce the reservoir economically and with minimal environmental impacts.

(3) Environmentally safe and feasible subsea completions are used if drilling platforms or islands would substantially degrade coastal visual qualities, unless the use of those structures will result in substantially less environmental risks.

(4) Platforms or islands will not be sited where a substantial hazard to vessel traffic might result from the facility or related operations, as determined in consultation with the United States Coast Guard and the Army Corps of Engineers.

(5) The development will not cause or contribute to subsidence hazards unless it is determined that adequate measures will be undertaken to prevent damage from that subsidence.

(6) With respect to new facilities, all oilfield brines are reinjected into oil-producing zones unless the Division of Oil, Gas, and Geothermal Resources of the Department of Conservation determines to do so would adversely affect production of the reservoirs and unless injection into other subsurface zones will reduce environmental risks. Exceptions to reinjections will be granted consistent with the Ocean Waters Discharge Plan of the State Water Resources Control Board and where adequate provision is made for the elimination of petroleum odors and water quality problems.

(7) (A)All oil produced offshore California shall be transported onshore by pipeline only. The pipelines used to transport this oil shall utilize the best achievable technology to ensure maximum protection of public health and safety and of the integrity and productivity of terrestrial and marine ecosystems.

(B) Once oil produced offshore California is onshore, it shall be transported to processing and refining facilities by pipeline.

(C) The following guidelines shall be used when applying subparagraphs (A) and (B):

(i) “Best achievable technology,” means the technology that provides the greatest degree of protection taking into consideration both of the following:

(I) Processes that are being developed, or could feasibly be developed, anywhere in the world, given overall reasonable expenditures on research and development.

(II) Processes that are currently in use anywhere in the world. This clause is not intended to create any conflicting or duplicative regulation of pipelines, including those governing the transportation of oil produced from onshore reserves.

(ii) “Oil” refers to crude oil before it is refined into products, including gasoline, bunker fuel, lubricants, and asphalt. Crude oil that is upgraded in quality through residue reduction or other means shall be transported as provided in subparagraphs (A) and (B).

(iii) Subparagraphs (A) and (B) shall apply only to new or expanded oil extraction operations. “New extraction operations” means production of offshore oil from leases that did not exist or had never produced oil, as of January 1, 2003, or from platforms, drilling island, subsea completions, or onshore drilling sites, that did not exist as of January 1, 2003. “Expanded oil extraction” means an increase in the geographic extent of existing leases or units, including lease boundary adjustments, or an increase in the number of well heads, on or after January 1, 2003.

(iv) For new or expanded oil extraction operations subject to clause (iii), if the crude oil is so highly viscous that pipelining is determined to be an infeasible mode of transportation, or where there is no feasible access to a pipeline, shipment of crude oil may be permitted over land by other modes of transportation, including trains or trucks, which meet all applicable rules and regulations, excluding any waterborne mode of transport.

(8) If a state of emergency is declared by the Governor for an emergency that disrupts the transportation of oil by pipeline, oil may be transported by a waterborne vessel, if authorized by permit, in the same manner as required by emergency permits that are issued pursuant to Section 30624.

(9) In addition to all other measures that will maximize the protection of marine habitat and environmental quality, when an offshore well is abandoned, the best achievable technology shall be used.

(b) Where appropriate, monitoring programs to record land surface and near-shore ocean floor movements shall be initiated in locations of new large-scale fluid extraction on land or near shore before operations begin and shall continue until surface conditions have stabilized. Costs of monitoring and mitigation programs shall be borne by liquid and gas extraction operators.

(c) Nothing in this section shall affect the activities of any state agency that is responsible for regulating the extraction, production, or transport of oil and gas.

(Amended by Stats. 2003, Ch. 420, Sec. 1. Effective January 1, 2004.)

CHAPTER 5. State Agencies

Article 1. General

§ 30404. (a) The Natural Resources Agency shall periodically, in the case of the State Energy Resources Conservation and Development Commission, the State Board of Forestry and Fire Protection, the State Water Resources Control Board and the California regional water quality control boards, the State Air Resources Board and air pollution control districts and air quality management districts, the Department of Fish and Game, the Department of Parks and Recreation, the California Geological Survey and the Division of Oil, Gas, and Geothermal Resources in the Department of Conservation, and the State Lands Commission, and may, with respect to any other state agency, submit recommendations designed to encourage the state agency to carry out its functions in a manner consistent with this division. The recommendations may include proposed changes in administrative regulations, rules, and statutes.

(b) This section shall become operative on July 1, 2013.

(Repealed (in Sec. 155) and added by Stats. 2012, Ch. 728, Sec. 156. Effective January 1, 2013. Section operative July 1, 2013, by its own provisions.)

Article 2. State Agencies

§ 30418. (a) Pursuant to Division 3 (commencing with Section 3000), the Division of Oil and Gas of the Department of Conservation is the principal state agency responsible for regulating the drilling, operation, maintenance, and abandonment of all oil, gas, and geothermal wells in the state. Neither the commission, local government, port governing body, or special district

shall establish or impose such regulatory controls that duplicate or exceed controls established by the Division of Oil and Gas pursuant to specific statutory requirements or authorization. This section shall not be construed to limit in any way, except as specifically provided, the regulatory controls over oil and gas development pursuant to Chapters 7 (commencing with Section 30600) and 8 (commencing with Section 30700).

(b) The Division of Oil and Gas of the Department of Conservation shall cooperate with the commission by providing necessary data and technical expertise regarding proposed well operations within the coastal zone.

(Amended by Stats. 1991, Ch. 285, Sec. 26.)

UNCODIFIED LAW

SEC. 45. SB 83 (Committee on Budget and Fiscal Review, Ch. 24, Statutes of 2015)

(a) By January 30, 2016, and every six months thereafter, the Department of Conservation and the State Water Resources Control Board shall report to the fiscal and relevant policy committees of the Legislature on the Underground Injection Control Program. The report shall include, but is not limited to, all of the following:

(1) The number and location of underground injection well and permits and project approvals issued by the department, including permits and projects that were approved but subsequently lapsed without having commenced injection.

(2) The average length of time to obtain an underground injection permit and project approval from date of application to the date of issuance.

(3) The number and description of underground injection permit violations identified.

(4) The number of enforcement actions taken by the department.

(5) The number of shut-in orders or requests to relinquish permits and the status of those orders or requests.

(6) The number, classification, and location of underground injection program staff and vacancies.

(7) Any state or federal legislation, administrative, or rulemaking changes to the program.

(8) The status of the review of the underground injection control projects and summary of the program's assessment findings completed during the reporting period, including any steps taken to address identified deficiencies.

(9) Summary of significant milestones in their compliance schedule agreed to with the United States Environmental Protection Agency, as indicated in the March 9, 2015, letter to the division and the state board from the United States Environmental Protection Agency, including, but not limited to, regulatory updates, evaluations of injection wells, and aquifer exemption applications.

(b) By January 30, 2016, and every six months thereafter, the department shall report on progress addressing the program's assessment findings and shall deliver that report to the fiscal and relevant policy committees of each house of the Legislature.

(c) By January 30, 2016, and every six months thereafter, the state board shall post on its Internet Web site a report on the status of the regulation of oil field produced water ponds within each region. The report shall include the total number of ponds in each region, the number of permitted and unpermitted ponds, enforcement actions, and the status of permitting the unpermitted ponds.

(d) This section shall become inoperative on March 1, 2019, and, as of January 1, 2020, is repealed, unless a later enacted statute that is enacted before January 1, 2020, deletes or extends the dates on which it becomes inoperative and is repealed.

SEC. 46. SB 83 (Committee on Budget and Fiscal Review, Ch. 24, Statutes of 2015)

(a) The Secretary for Environmental Protection and the Secretary of the Natural Resources Agency shall appoint an independent review panel, on or before January 1, 2018, to evaluate the regulatory performance of the Division of Oil, Gas and Geothermal Resources' administration of the Underground Injection Control Program and to make recommendations on how to improve the effectiveness of the program, including resource needs and statutory or regulatory changes, as well as program reorganization, including transferring the program to the State Water Resources Control Board.

(b) The review panel shall consist of participants with a diverse range of backgrounds and expertise, including, but not limited to, the oil and gas industry, public health, environmental and natural resources, environmental justice, agriculture, and scientific and academic research.

(c) The review panel shall take input from a broad range of stakeholders with a diverse range of interests affected by state policies governing oil and gas resources, public health, environmental and natural resources, environmental justice, and agriculture, as well as from the general public, in the preparation of its evaluation and recommendations.

CALIFORNIA CODE OF REGULATIONS

CHAPTER 2. Implementation of the California Environmental Quality Act of 1970

Article 1. Definitions

§ 1681. Scope of Regulations.

These regulations refer to the requirements of the Division of Oil, Gas, and Geothermal Resources in the preparation of environmental documents under CEQA. They are to be used in conjunction with the "State CEQA Guidelines," Title 14 California Code of Regulations, Sections 15000 et seq.

Authority: Sections 606, 3013 and 21082, Public Resources Code. Reference: Sections 21000-21176, Public Resources Code.

§ 1681.1. Decision Making Body.

"Decision making body" means any person or group of people within a public agency permitted by law to approve or disapprove the project at issue. Where an applicant requests approval of a Notice of Intention to drill for an oil, gas, or geothermal well, the "decision making body" is the State Oil and Gas Supervisor or his or her representative.

Authority: Section 21082, Public Resources Code. Reference: Section 21080, Public Resources Code.

§ 1681.4. Geothermal Exploratory Project.

(a) A geothermal exploratory project is for the purpose of evaluating the presence and characteristics of geothermal resources prior to starting a geothermal field development project. An exploratory project is comprised of not more than six wells. The wells must be located at least one-half mile from the surface location of any existing geothermal wells that are capable of producing geothermal resources in commercial quantities.

(b) For the purpose of preparing an environmental document for an exploratory project, a description of the environmental impacts of a project shall be limited to the proposed drill sites, the proposed wells, and any roads or other facilities that may be required before the exploratory wells can be drilled.

The environmental document for the exploratory project does not need to describe the environmental impacts of any future exploratory or development projects.

Authority: Section 21082, Public Resources Code. Reference: Sections 21065.5 and 21090.1, Public Resources Code.

Article 2. General Responsibilities for Geothermal Projects

§ 1682. Contents of a Geothermal Project Application.

An application for a geothermal exploratory project shall include:

(a) A statement declaring that the purpose of the proposed project is to evaluate the presence and characteristics of geothermal resources and that the surface location of each well in the project is at least one-half mile from the surface location of an existing well capable of producing geothermal resources in commercial quantities.

(b) The following information in narrative form:

(1) A description of the project including a regional map showing the location of the proposed well(s).

(2) A statement of whether or not the project is compatible with existing zoning and State and local plans.

(3) A description of the environmental setting.

(4) A description of probable short-term and long-term environmental effects of the project.

(5) A description of measures acceptable to the project sponsor which mitigate the project's probable environmental effects.

(6) A description of any significant adverse environmental impacts which the project sponsor cannot mitigate.

(c) A statement that the sponsor agrees to provide additional environmental information the Division may need to complete any environmental documents required by CEQA.

Authority: Sections 3012 and 21082, Public Resources Code. Reference: Sections 3715.5 and 21160, Public Resources Code.

§ 1682.1. Lead Agency CEQA Time Limits for Geothermal Projects.

When the Division accepts an application for a geothermal exploratory project as complete, the Division shall prepare or cause the preparation of the required environmental documents and make a decision on the project within 135 days.

(a) The time limit shall be measured from the date on which the application is accepted as complete.

(b) Within 30 days after receiving an application for a geothermal exploratory project, the Division shall determine whether the application is complete and whether the project will require a Notice of Exemption, an Environmental Impact Report (EIR) or a Negative Declaration.

(c) The Division shall consult with Responsible Agencies to discuss the scope and content of a proposed environmental document pursuant to Section 168.3.1(b) of these regulations.

Authority: Sections 3012 and 21082, Public Resources Code. Reference: Sections 3715.5, 21080.1 and 21080.3, Public Resources Code.

Article 3. Application of the Act to Geothermal Projects

§ 1683. Federal Geothermal Project Coordination.

Where a geothermal exploratory project will be subject to both CEQA and the National Environmental Policy Act, the Division shall approve or disapprove the project within 135 days.
Authority: Sections 3012 and 21082, Public Resources Code. Reference: Sections 3715.5, 21083.5 and 21083.7, Public Resources Code.

§ 1683.1. Consultation in Connection with a Geothermal Project.

(a) Prior to determining whether a Notice of Exemption, Negative Declaration, or EIR is required for a geothermal exploratory project, the Division shall consult with each Responsible Agency and Trustee Agency responsible for natural resources affected by the project.

(b) In connection with a geothermal exploratory project, the Division shall consult with Responsible Agencies to discuss the scope and content of a proposed environmental document as soon as possible but not later than 30 days after the Division receives an application. The Division may waive this requirement if the project has no significant environmental impact or if the project sponsor agrees to mitigate all foreseeable environmental impacts. This requirement may be met through written correspondence.
Authority: Sections 3012 and 21082, Public Resources Code. Reference: Sections 3715.5 and 21080.3, Public Resources Code.

§ 1683.2. Geothermal Discretionary Projects.

Permitting actions of the Division for geothermal exploratory projects are discretionary under CEQA, when the Division acts as lead agency.
Authority: Sections 3012 and 21082, Public Resources Code. Reference: Sections 3715.5 and 21080, Public Resources Code.

§ 1683.5. Responsible Agency CEQA Time Limits.

As soon as possible after receiving a Notice of Preparation and in no event more than 45 days after receiving the notice, a Responsible Agency shall inform the Lead Agency of the scope and content of the environmental information that the Responsible Agency would need in the EIR.
Authority: Section 21082, Public Resources Code. Reference: Sections 21000-21176, Public Resources Code.

§ 1683.6. Delegation of Responsibilities for Geothermal Lead Agency.

The Division may delegate its Lead Agency responsibility for geothermal exploratory projects to a county that has adopted a geothermal element for its general plan and agreed to complete its Lead Agency responsibilities for such projects within 135 days of receipt of a complete application for such project.
Authority: Sections 3012 and 21082, Public Resources Code. Reference: Section 3715.5, Public Resources Code.

§ 1683.7. Delegation of Lead Agency Responsibilities for Geothermal Exploratory Projects.

(a) A request for delegation of Lead Agency responsibilities for geothermal exploratory projects shall contain a letter of request signed by the Chairperson of the Board of Supervisors, copies of the county's adopted geothermal element, the final environmental document on the element, and copies of the county's CEQA procedures which detail the county method of completing its Lead Agency responsibilities for geothermal exploratory projects within 135 days.

(b) Upon receipt of the request, the State Oil and Gas Supervisor shall transmit a copy of the geothermal element and final environmental document to the Office of Planning and Research (OPR) and shall consult with the OPR prior to making a decision on the county's request. The Supervisor may consult with any other agencies, at his or her discretion.

(c) If the geothermal element and CEQA procedures are adequate, the Supervisor shall approve the request.

Authority: Section 21082, Public Resources Code. Reference: Sections 21000-21176, Public Resources Code.

Article 4. Evaluating Projects

§ 1684. Categorical Exemptions.

Section 21084 of the Public Resources Code requires these Guidelines to include a list of classes of projects which have been determined not to have a significant effect on the environment and which shall, therefore, be exempt from the provisions of the Environmental Quality Act of 1970.

In response to that mandate, the Secretary for Resources has found that the following classes of projects listed in this article do not have a significant effect on the environment and they are declared to be categorically exempt from the requirement for the preparation of environmental documents. Only those classes of projects that would pertain to the responsibilities of the Division of Oil, Gas, and Geothermal Resources are listed in these regulations.

Authority: Section 21082, Public Resources Code. Reference: Section 21084, Public Resources Code.

§ 1684.1. Class 1: Existing Facilities.

Class 1 consists of the operation, repair, maintenance, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features involving negligible or no expansion of use beyond that existing previously. The Class includes, but is not limited to: remedial, maintenance, conversion, and abandonment work on oil, gas, injection, and geothermal wells involving the alteration of well casing, such as perforating and casing repair, removal, or replacement; installation or removal of downhole production or injection equipment, cement plugs, bridge plugs, and packers set to isolate production or injection intervals.

Authority: Section 21082, Public Resources Code. Reference: Section 21080, Public Resources Code.

§ 1684.2. Class 4: Minor Alterations to Land.
Class 4 consists of drilling operations that result only in minor alterations with negligible or no permanent effects to the existing condition of the land, water, air, and/or vegetation.
Authority: Section 21082, Public Resources Code. Reference: Section 21080, Public Resources Code.

Article 5. Evaluation of Environmental Impact Reports

§ 1685. Adequate Time for Review and Comment.
The Department shall provide adequate time for other agencies and members of the public to review and comment on EIR's that the Department or one of its subdivisions prepares. The review periods the Department sets shall coincide with those the State Clearinghouse sets, provided that the review period for draft EIR's for geothermal exploratory projects shall be no longer than 30 calendar days.
Authority: Section 21082, Public Resources Code. Reference: Sections 3715.5 and 21092, Public Resources Code.

CHAPTER 3. Selection of Professional Service Firms

§ 1690. Selection of Professional Service Firms.
(a) The purpose of these regulations is to establish those procedures authorized and required by Chapter 10 (commencing with Section 4525) of Division 5 of Title 1 of the Government Code.
(b) Selection by the Division for professional services of private architectural, landscape architectural, engineering, environmental, land surveying, or construction project management firms shall be on the basis of demonstrated competence and on the professional qualifications necessary for the satisfactory performance of the services required. Selection of the services of analytical laboratory, forestry, geological, geophysical, and other firms shall be on this same basis when the additional services qualify as environmental services or ancillary services logically or justifiably performed in connection with architectural, landscape architectural, engineering, environmental, land surveying, or construction project management services.
Authority: Sections 3013 and 3106, Public Resources Code; and Section 4526, Government Code. Reference: Sections 4525-4529.5, Government Code.

§ 1690.1. Definitions, as Used in These Regulations.
(a) “Division” means the Division of Oil, Gas, and Geothermal Resources in the Department of Conservation.

(b) “Small business” shall mean a small business firm as defined by the Director of General Services (Section 1896, Title 2 of California Code of Regulations) pursuant to Section 14837 of the Government Code.

(c) “Architectural, landscape architectural, engineering, environmental, land surveying, and construction project management services” are those services to be procured outside State of California Civil Service procedures and of a character necessarily rendered by an architect, landscape architect, engineer, environmental specialist, land surveyor, and construction project management contractor, but may include ancillary services logically or justifiably performed in connection therewith.

(d) “Project” means a project as defined in Section 10105 of the Public Contract Code, or as defined in Public Resources Code section 21065.

Authority: Section 4526, Government Code; and Section 3013, Public Resources Code.
Reference: Sections 4525-4529.5 and 14837, Government Code; and Section 10105, Public Contract Code; and Section 21065, Public Resources Code.

§ 1691. Establishment of Criteria.

(a) The Division shall establish criteria, on a case-by-case basis, which will comprise the basis for selection for each project. The criteria shall include, but is not limited to, such factors as professional excellence, demonstrated competence, specialized experience of the firm, education and experience of key personnel to be assigned, staff capability, workload, ability to meet schedules, nature and quality of completed work, reliability and continuity of the firm, location, and other considerations deemed relevant. Such factors shall be weighted by the Division according to the nature of the project, the needs of the State and complexity and special requirements of the specific project.

(b) In no event shall the criteria include practices which might result in unlawful activity including, but not limited to, rebates, kickbacks, or other unlawful consideration. Division staff with a relationship to a person or business entity seeking a contract under this section are prohibited from participating in the selection process if the Division staff would be subject to the prohibition of Government Code Section 87100.

Authority: Section 4526, Government Code; and Section 3013, Public Resources Code.
Reference: Sections 4525-4529.5 and 87100, Government Code.

§ 1692. Estimate of Value of Services.

Before any discussion with any firm concerning fees, the Division may cause an estimate of the value of such services to be prepared. This estimate shall serve as a guide in determining fair and reasonable compensation for the services rendered. Such estimate shall be, and remain, confidential until award of contract or abandonment of any further procedure for the services to which it relates. At any time the Division determines the estimates to be unrealistic because of rising costs, special conditions, or for other relevant considerations, the estimate may be reevaluated and modified if necessary.

Authority: Section 4526, Government Code; and Section 3013, Public Resources Code.
Reference: Sections 4525-4529.5, Government Code.

§ 1693. Request for Qualifications.

(a) Where a project requires architectural, landscape architectural, engineering, environmental, land surveying, or construction project management services, the Division shall make an announcement in a publication of the respective professional society. Additionally, the Division may publish an announcement in a construction trade journal or in other appropriate publication, if any exist. The announcement shall be published within a reasonable time frame so that a lengthy publication delay does not adversely affect the project.

(b) The announcement shall contain the following information: The nature of the work, the criteria upon which the award shall be made, and the time within which statements of interest, qualification and performance data will be received.

(c) The Division shall endeavor to provide to all small business firms who have indicated an interest in receiving such, a copy of each announcement for projects for which the Division concludes that small business firms could be especially qualified. A failure of the Division to send a copy of an announcement to any firm shall not operate to preclude any contract.

Authority: Section 4526, Government Code; and Section 3013, Public Resources Code.
Reference: Sections 4525-4529.5, Government Code.

§ 1694. Selection of Firm.

After expiration of the time period stated in the announcement, the Division shall evaluate statements of qualifications and performance data which have been submitted to the Division. Discussions shall be conducted with no less than three firms regarding the required service. Where three firms cannot be found which could provide the required service, a full explanation including names and addresses of firms and individuals requested to submit proposals must be entered in the files. From the firms with which discussions are held, the Division shall select no less than three, provided at least three firms submit proposals, in order of preference, based upon the established criteria, which are deemed to be the most highly qualified to provide the services required.

Authority: Section 4526, Government Code; and Section 3013, Public Resources Code.
Reference: Sections 4525-4529.5, Government Code.

§ 1695. Negotiation.

The Division shall attempt to negotiate a contract with the most highly qualified firm. When the Division is unable to negotiate a satisfactory contract with this firm with fair and reasonable compensation provisions, as determined by the procedure set forth in Section 1692 if those procedures were used, negotiations shall be terminated. The Division shall then undertake negotiations with the second most qualified firm on the same basis. Failing accord, negotiations shall be terminated. The Division shall then undertake negotiations with the third most qualified firm on the same basis. Failing accord, negotiations shall be terminated. Should the Division be unable to negotiate a satisfactory contract at fair and reasonable compensation with any of the

selected firms, additional firms may be selected in the manner prescribed in this Chapter and the negotiation procedure continued.
Authority: Section 4526, Government Code; and Section 3013, Public Resources Code.
Reference: Sections 4525-4529.5, Government Code.

§ 1696. Amendments.
In instances where the Division effects a necessary change in the project during the course of performance of the contract, the firm's compensation may be adjusted by negotiation of a mutual written agreement in a fair and reasonable amount where the amount of work to be performed by the firm is changed from that which existed previously in the contemplation of the parties.
Authority: Section 4526, Government Code; and Section 3013, Public Resources Code.
Reference: Sections 4525-4529.5, Government Code.

§ 1697. Contracting in Phases.
Should the Division determine that it is necessary or desirable to have a given project performed in phases, it will not be necessary to negotiate the total contract price or compensation provisions in the initial instance, provided that the Division shall have determined that the firm is best qualified to perform the whole project at a fair and reasonable cost, and the contract contains provisions that the Division, at its option, may utilize the firm for other phases and that the firm will accept a fair and reasonable price for subsequent phases to be later negotiated and reflected in a subsequent written instrument. The procedure with regard to estimates and negotiation shall otherwise be applicable.
Authority: Section 4526, Government Code; and Section 3013, Public Resources Code.
Reference: Sections 4525-4529.5, Government Code.

§ 1698. Division’s Power to Require Bids.
Where the Division determines that the services needed are technical in nature and involve little professional judgment and that requiring bids would be in the public interest, a contract shall be awarded on the basis of bids rather than by following the foregoing procedures for requesting proposals and negotiations.
Authority: Section 4526, Government Code; and Section 3013, Public Resources Code.
Reference: Sections 4525-4529.5, Government Code.

§ 1699. Exclusions.
The provisions of this article shall not apply to service agreements for an architect, landscape architect, engineer, environmental specialist, land surveyor, or construction project management contractor, engaged to provide consulting services on specific problems on projects where the architectural, landscape architectural, engineering, environmental, land surveying, or construction project management work is being performed by State of California Civil Service

employees nor to service agreements for the services of recognized experts retained as consultants.
Authority: Section 4526, Government Code; and Section 3013, Public Resources Code. Reference: Sections 4525-4529.5, Government Code.

CHAPTER 4. Development, Regulation, and Conservation of Oil and Gas Resources

Subchapter 1.Onshore Well Regulations

Article 1. General

§ 1712. Scope of Regulations.

These regulations shall be statewide in application for onshore drilling, production, and injection operations. All onshore prospect, development, and service wells shall be drilled and operated in accordance with these regulations, which shall continue in effect until field rules are established by the Supervisor pursuant to Section 1722(k). If field rules are established, oil and gas operations shall be performed in accordance with those field rules.
Authority: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1714. Approval of Well Operations.

Written approval of the Supervisor is required prior to commencing drilling, reworking, injection, plugging, or plugging and abandonment operations, with the exception that temporary approval to commence such operations may be granted by the Supervisor or a representative of the Supervisor when such operations are necessary to avert a threat to life, health, property, or natural resources, or when approved operations are in progress and newly discovered well conditions are such that immediate corrective or plugging and abandonment operations are desirable. Notwithstanding such temporary approval, the operator shall file immediately a written notice of intention to carry out a temporarily approved program.
In addition, written approval of the Supervisor is required prior to utilizing any well, including a plugged and abandoned well, for anything other than its currently approved purpose, such as conversion to injection or production, use as a sacrificial anode in a cathodic-protection program, or conversion to a freshwater well.
Authority: Section 3013, Public Resources Code. Reference: Sections 3008, 3106, 3203 and 3229, Public Resources Code.

Article 2. Definitions

§ 1720. Definitions.

(a) “Critical well” means a well within:

(1) 300 feet of the following:

(A) Any building intended for human occupancy that is not necessary to the operation of the well; or

(B) Any airport runway.

(2) 100 feet of the following:

(A) Any dedicated public street, highway, or nearest rail of an operating railway that is in general use;

(B) Any navigable body of water or watercourse perennially covered by water;

(C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground, or any other area of periodic high-density population; or

(D) Any officially recognized wildlife preserve.

Exceptions or additions to this definition may be established by the Supervisor upon his or her own judgment or upon written request of an operator. This written request shall contain justification for such an exception.

(b) “Rework” means any operation subsequent to drilling that involves deepening, redrilling, plugging, or permanently altering in any manner the casing of a well or its function.

(c) “New pool” means, for the purpose of this subchapter, a pool discovered on or after January 1, 1974.

(d) “Directional survey” means a well survey that determines the deviation of the hole in degrees from the vertical and the direction (azimuth) and amount of horizontal deviation of the hole from the surface location.

(e) “Drift-only survey” means a well survey that determines the deviation of the hole in degrees from the vertical.

(f) “Operations” means any one or all of the activities of an operator covered by Division 3 of the Public Resources Code.

(g) “Onshore well” means a well located on lands that are not submerged under ocean waters or inland bays during mean high tide. Note:Wells directionally drilled offshore from onshore locations shall fall within the scope of the Onshore Regulations and wells directionally drilled onshore from offshore locations shall fall within the scope of the Offshore Regulations (Subchapter 1.1).

(h) “Ultimate economic recovery” means the maximum physical amount of a substance, such as oil or gas, that can be recovered without economic loss.

(i) “Economic loss” means the loss that occurs when the lifetime discounted revenue after current dollar operating costs, including royalties and ad valorem, severance, and excise taxes, becomes less than the initial drilling and completion costs. The discount rate shall be equal to current prime lending rates plus two percent.

Authority: Sections 3013 and 3609, Public Resources Code. Reference: Sections 3000, 3013, 3106 and 3609, Public Resources Code.

§ 1720.1 Definitions.

The following definitions are applicable to this subchapter:

(a) “Area of review” means an area around each injection well that is part of an underground injection project. The area of review shall be proposed by the operator as part of an underground injection project application or review, but may be specified by the Division depending on project-specific data and any other factors determined by the Division to ensure that the area of review is at least as broad as the area of influence. The area of review is either:

(1) The calculated lateral distance encompassing within and beyond the intended injection zone to which the pressures or temperatures in the intended injection zone may cause the migration of the injection fluid or the reservoir fluid; or

(2) A fixed one-quarter-mile radius.

(b) “Cyclic steam injection well” means an injection well that injects steam into an underground formation and then subsequently produces hydrocarbons.

(c) “Disposal injection well” means an injection well into which fluid is injected primarily for purposes of disposal rather than enhancing the recovery of hydrocarbons.

(d) “Fluid” means any material or substance which flows or moves, whether semisolid, liquid, gas, or steam.

(e) “Freshwater” means water that contains 3,000 mg/L TDS or less.

(f) “Injection well” means a well into which fluids are being injected as part of an underground injection project, or that is approved by the Division for such purpose. A gas storage well, as defined in Section 1726.1(a)(4), is not an injection well.

(g) “Injection zone” means the defined three-dimensional space with fixed boundaries where fluid injected by an underground injection project is anticipated to occupy or otherwise be located. The injection zone may include more than one formation or strata.

(h) “Low-energy seep” means a surface expression for which the operator has demonstrated all of the following to the Division:

(1) The fluid coming to the surface is low-energy and low-temperature;

(2) The fluid coming to the surface is not injected fluid; and

(3) The fluid coming to the surface is contained and monitored in a manner that prevents damage to life, health, property, and natural resources.

(i) “Low-use cyclic steam injection well” means a cyclic steam injection well that meets all of the following criteria:

(1) In the past five calendar years, the well has not had more than 24 days of injection in a calendar year;

(2) In the past five calendar years, the well has not had a volume of more than 12,000 barrels of injection in a calendar year; and

(3) The well is not part of an underground injection project that has been known to cause surface expressions, as described in Section 1724.11(b).

(j) “Mechanical integrity” means that all mechanical well barriers, including but not limited to, the tubing, packer, wellhead, and casing of a well, reliably perform their primary functions of containing pressure and are free from leakage.

(k) “Mg/L TDS” means milligrams per liter of total dissolved solids content.

(l) “Project Approval Letter” means the written record by which the Division documents its approval of an underground injection project, including any specific conditions applicable to the approval of that underground injection project.

(m) “Steamflood injection well” means an injection well that injects steam into an underground formation for purposes of enhancing the hydrocarbon recovery of other producing wells.

(n) “Surface expression” means a flow, movement, or release from the subsurface to the surface of fluid or other material such as oil, water, steam, gas, formation solids, formation debris, material, or any combination thereof, that is outside of a wellbore and that appears to be caused by injection operations.

(o) “Surface expression containment measure” means an engineered measure to contain or collect the fluids or materials from a surface expression, including but not limited to, subsurface collection systems, collection wells, cisterns, culverts, French drains, collection boxes, earthen ditches, containment berms, or gas hoods or other gas collection systems.

(p) "Underground injection project" means sustained or recurring injection into one or more wells over an extended period into an approved injection zone for the purpose of enhanced oil recovery, disposal, storage of liquid hydrocarbons, pressure maintenance, or subsidence mitigation. Examples of underground injection projects include, but are not limited to, waterflood injection, steamflood injection, cyclic steam injection, carbon dioxide enhanced oil recovery, and disposal injection. An underground gas storage project, as defined in Section 1726.1(a)(6), is not an underground injection project.

(q) “Underground source of drinking water” or “USDW” means an aquifer or its portion which has not been approved by the United States Environmental Protection Agency as an exempted aquifer pursuant to the Code of Federal Regulations, title 40, section 144.7, and which:

(1) Supplies a public water system, as defined in Health and Safety Code section 116275; or

(2) Contains a sufficient quantity of groundwater to supply a public water system, as defined in Health and Safety Code section 116275; and

(A) Currently supplies drinking water for human consumption; or

(B) Contains fewer than 10,000 mg/L TDS.

(r) “Water source well” means a 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.

(s) “Water supply well” means a well that provides water for domestic, municipal, industrial, or irrigation purposes, but does not include a water source well.

(t) “Waterflood injection well” means an injection well that injects water or water-based liquid into an underground formation for purposes of enhancing the hydrocarbon recovery of producing wells.

Note: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

Article 2.1. Well Spacing Patterns-New Pools

§ 1721. Objectives and Policy.

The objectives of this article are to prevent waste, protect correlative rights, increase the ultimate economic recovery of oil and gas, or either, from new pools, and protect health, safety, welfare, and the environment.

To achieve the ultimate economic recovery of oil and gas, it shall be the policy of the Supervisor to give the greatest consideration to the minimum spacing, in acres per well, that can be established based on the geologic geometry of the pool and the area that can be effectively and efficiently drained by a well without economic loss.

Authority: Section 3609, Public Resources Code. Reference: Section 3609, Public Resources Code.

§ 1721.1. Set Back.

The producing interval of any well drilled into a new pool after the effective date of this section shall be not less than 75 feet from an outer boundary line.

Authority: Section 3609, Public Resources Code. Reference: Section 3609, Public Resources Code.

§ 1721.2. Well Spacing Initiated by Supervisor.

(a) Whenever a new pool is discovered, the Supervisor may issue a notice of intent to establish a well-spacing plan for the pool the notice shall specify the well-spacing plan proposed by the Supervisor. The notice shall be delivered or mailed to all operators in the pool and any other affected persons whose identity is known to or can readily be ascertained by the Division, and shall be published in a newspaper of general circulation in the county in which the pool is located.

(b) The notice shall provide that the well spacing plan proposed by the Supervisor shall take effect as an order of the Supervisor on the 31st day after the date of the notice unless within 30 days after the date of the notice the Supervisor receives a written objection to the proposed well spacing plan from any affected person, submitting a written objection is a prerequisite to any challenge to the implementation of a well spacing plan initiated by the Supervisor. If a written objection is timely received, the Supervisor shall set a hearing on the well spacing proposal and shall give notice of that hearing in the manner provided above, within 10 days of receipt of the written objection. The hearing shall be held at a time not less than 15 days nor more than 60 days from the date of the notice and at a place within the oil and gas district where the new pool is located. The hearing may be continued for a period not to exceed 60 days with the consent of all those affected persons having informed the Division of their intent to participate in the hearing.

(c) Within 45 days following the hearing, the Supervisor shall issue an order in the form of a written decision either providing no well spacing plan or specifying a well spacing plan for the pool. If a well spacing plan is adopted, the plan shall describe the pool to which it applies and

set forth the surface and subsurface well spacing pattern for all wells to be drilled or redrilled into the pool.

(d) The Supervisor shall mail or deliver the written decision to all operators in the pool and all other previously identified affected persons.

(e) The Supervisor may request at any time from any operator in the pool any or all of the data listed in Section 1721.3 for use in making the well spacing determination. If such data are neither supplied nor otherwise available to the Supervisor, the Supervisor nevertheless may make a well spacing determination using methods found in petroleum industry literature or by analogy to similar pools.

Authority: Section 3609, Public Resources Code. Reference: Sections 3609, Public Resources Code.

§ 1721.3. Petition for Well Spacing.

Any affected person may, at any time after the discovery of a new pool, petition the Supervisor to adopt, pursuant to Public Resources Code Section 3609, a well-spacing plan other than that specified in Public Resources Code Sections 3600 to 3608.1, inclusive, or Section 1721.1 hereof. The petition shall be supported by information necessary to establish the need for an extent of such a well-spacing plan. The petition shall contain the following data pertaining to the pool for which well-spacing is sought and shall include the source (i.e., laboratory analyses, field measurements, published reports, etc.) from which such data are derived:

(a) Lease map of the area showing current lease operator and well locations.

(b) Structural contour map drawn on a geologic marker at or near the top of the pool, which includes estimated productive limits of the pool.

(c) At least two geologic cross sections, one that is parallel to and one that is perpendicular to the structural or depositional strike, and through at least one producing well in the pool.

(d) Representative electric log to a depth below the producing pool (if not already shown on the cross section) identifying all geologic units, formations, and oil or gas zones.

(e) Average net productive thickness in feet.

(f) Average effective porosity as a percent of bulk volume.

(g) Average initial oil, water, and gas saturations as a percent of pore volume.

(h) Most probable oil and gas recovery factors as percents of original oil and gas in place.

(i) Average initial stabilized oil and gas producing rates in barrels per day per well and thousand standard cubic feet per day per well.

(j) Complete reservoir pressure history, including the initial shut-in bottom hole pressure and the bubble point pressure of a crude oil system or dew point pressure of a condensate system.

(k) Reservoir temperature in degrees Fahrenheit.

(l) Solution gas/oil ratio at bubble point pressure and reservoir temperature.

(m) Initial oil formation volume factor as reservoir barrels per stock tank barrel.

(n) Average API gravity of stock tank oil and specific gravity of produced gas.

(o) Average current drilling and completion cost in dollars per well.

(p) Average current operating cost in dollars per well per year, including anticipated workover costs.

(q) Current market value of oil and gas production in dollars per stock tank barrel and dollars per thousand standard cubic feet.

(r) Amount of all royalty interests, including overriding royalties, if any, in the tracts proposed for inclusion in the well-spacing plan.

(s) Current ad valorem, severance, and excise taxes levied on the working interests, or production attributable to the working interests, proposed for inclusion in the well-spacing plan. Failure to supply in the petition of any of these data that are available and their source shall be grounds for denial of the petition without a hearing.

Authority: Section 3609, Public Resources Code. Reference: Section 3609, Public Resources Code.

§ 1721.3.1. Action on Petition for Well Spacing.

(a) Within 30 days of receipt of a petition for well spacing deemed complete by the Division, the Supervisor shall issue a notice setting a time and place for a hearing on the petition. The notice of hearing on the petition shall provide that the hearing shall be held not less than 15 days nor more than 60 days from the date of the notice and at a place within the oil and gas district in which the new pool is located. The hearing may be continued for a period not to exceed 60 days with the consent of all those affected persons having informed the Division of their intent to participate in the hearing. The notice of hearing shall be given in the manner prescribed in Section 1721.2. The hearing shall not be limited to consideration of the well-spacing plan proposed in the petition but shall encompass consideration of any appropriate well-spacing plan for the pool.

(b) Within 45 days following the hearing, the Supervisor shall issue an order in the form of a written decision which either shall refuse to adopt a well-spacing plan or shall adopt a well-spacing plan for the pool based on scientific principles and good oilfield practices. The adopted plan shall describe the pool to which it applies and set forth the surface and subsurface well-spacing pattern for all wells to be drilled or redrilled into the pool.

(c) The Supervisor shall mail or deliver the written decision to all operators in the pool and all other previously identified affected persons.

Authority: Section 3609, Public Resources Code. Reference: Section 3609, Public Resources Code.

§ 1721.4. No New Drilling or Reworking Pending Decision on Well Spacing.

Upon the issuance by the Supervisor of a notice of intent to establish a well spacing plan under Section 1721.2 or upon the filing of a complete petition for well spacing under Section 1721.3, no drilling or reworking operations shall begin on any well to be completed in the pool subject to possible well spacing even if the operator has an approved notice of intention to drill or rework until an order has been issued by the Supervisor that disposes with all the matters in the Supervisor's notice or in the petition. If drilling or reworking operations have started in a well prior to the issuance of a notice or the filing of a petition, the operations may continue until completion. This temporary suspension of drilling and reworking operations is for the purpose of

preventing operations during the pendency of well spacing proceedings that would preclude the establishment of an optimum spacing pattern.
Authority: Section 3609, Public Resources Code. Reference: Section 3609, Public Resources Code.

§ 1721.5. Judicial Review of Order of Supervisor.
There shall be no appeal to the Director from an order of the Supervisor either adopting or failing to adopt a well-spacing plan. Judicial review of any such order may be sought directly.
Authority: Section 3609, Public Resources Code. Reference: Section 3609, Public Resources Code.

§ 1721.6. Revision or Repeal of Spacing Plan.
Any well-spacing plan adopted by the Supervisor shall be subject to revision or repeal pursuant to either the initiative of the Supervisor or a petition of an affected person. Any revision or repeal shall be preceded by notice and hearing as provided in Section 1721.2.
Authority: Section 3609, Public Resources Code. Reference: Section 3609, Public Resources Code.

§ 1721.7. Exceptions.
The Supervisor may approve the drilling, redrilling, or production of a well which does not comply with the requirements of a well-spacing plan adopted pursuant to this article or with the set back requirement of section 1721.1 of these regulations if, in the opinion of the Supervisor, such drilling, redrilling, or production is necessary to accommodate the use of onshore or offshore central drilling sites; to protect health, safety, welfare, or the environment; to prevent waste; or to otherwise increase the ultimate economic recovery of oil and gas.
Authority: Section 3609, Public Resources Code. Reference: Section 3609, Public Resources Code.

§ 1721.8. Pooling.
A well-spacing plan adopted by the Supervisor shall require that all or certain parcels of land be included in a voluntary or mandatory pooling agreement if necessary to protect correlative rights. The Supervisor may provide, in any order adopting a well-spacing plan, for a period not to exceed 60 days from the date of the order during which the affected parties shall be allowed to attempt to pool voluntarily their respective interests. Such period may be extended at the Supervisor's discretion upon the written request of the affected parties. Any well-spacing order providing a period for an attempt at voluntary pooling is not a final order of the Supervisor until either voluntary pooling has been accomplished and the Supervisor notified of it or the Supervisor has ordered mandatory pooling upon the failure of the affected parties to reach a pooling agreement voluntarily.
Authority: Section 3609, Public Resources Code. Reference: Section 3609, Public Resources Code.

§ 1721.9 Surveys.

For the purpose of enforcement of this article, the Supervisor may order that a directional survey or drift-only survey of a well be made and filed with the Supervisor before the well can be produced. If such a survey shows that the producing interval of a well is less than 75 feet from an outer boundary line or does not conform to the well-spacing plan, then written approval must be obtained from the Supervisor before the well can be produced.

Authority: Section 3609, Public Resources Code. Reference: Section 3609, Public Resources Code.

Article 3. Requirements

§ 1722. General.

(a) All operations shall be conducted in accordance with good oilfield practice.

(b) The operator for a facility or group of related facilities shall develop a spill contingency plan. Spill contingency plans shall also be developed by the operator for those facilities within gas fields that produce condensate at an average rate of at least one barrel per day or where condensate storage volume exceeds 50 barrels. The plan(s) shall be filed with the appropriate Division district office within six months of the effective date of Section 1722.9 or within three months after initial production or acquisition of a facility. Plans prepared pursuant to Federal Environmental Protection Agency regulations (SPCC Plans) may fulfill the provisions of this subsection if such plans are determined to be adequate by the appropriate Division district deputy. If, in the judgment of the Supervisor, a plan becomes outdated, the Supervisor may require that the plan be updated to ensure that it addresses and applies to current conditions and technology.

(c) For certain critical or high-pressure wells designated by the Supervisor, a blowout prevention and control plan, including provisions for the duties, training, supervision, and schedules for testing equipment and performing personnel drills, shall be submitted by the operator to the appropriate Division district deputy for approval.

(d) Notices of intention to drill, deepen, redrill, rework, or plug and abandon wells shall be completed on current Division forms and submitted, in duplicate, to the appropriate Division district office for approval. Such notices shall include all information required on the forms, and such other pertinent data as the Supervisor may require. Notices of intention and approvals will be cancelled if the proposed operations have not commenced within one year of receipt of the notice. However, an approval for proposed operations may be extended for one year if the operator submits a supplementary notice prior to the expiration of the one-year period and can show good cause for such an extension. For the purpose of interpretation and enforcement of provisions of this section, operations, when commenced, must be completed in a timely and orderly manner.

(e) A copy of the operator's notice of intention and any subsequent written approval of proposed operations by the Division shall be posted at the well site throughout the operations.

(f) Operators shall give the appropriate Division district office sufficient advance notice of the time for inspections and tests requiring the presence of Division personnel.

(g) Operations approved by the Division shall not deviate from the approved program without prior Division approval, except in an emergency.

(h) Oil spills shall be promptly reported to the California Emergency Management Agency by calling the toll-free telephone number (800) 852-7550 and by contacting the agencies specified in the operator's spill contingency plan.

(i) Blowouts, fires, serious accidents, and significant gas or water leaks resulting from or associated with an oil or gas drilling or producing operation, or related facility, shall be promptly reported to the appropriate Division district office.

(j) The use of radioactive materials in wells shall comply with the California Department of Health Services regulations in Title 17, Division 1, Chapter 5, Subchapter 4 of the California Code of Regulations. With the exception of radioactive tracers used in injection surveys, the loss of radioactive materials in a well shall be promptly reported to the Department of Health Services pursuant to Section 30350.3 of the above-referenced regulations and to the appropriate Division district office.

(k) When sufficient geologic and engineering information is available from previous drilling or producing operations, operators may make application to the Supervisor for the establishment of field rules, or the Supervisor may establish field rules or change established field rules for any oil or gas field. Before establishing or changing a field rule, the Supervisor shall distribute the proposed rule or change to affected persons and allow at least thirty (30) days for comments from the affected persons. The Supervisor shall notify affected persons in writing of the establishment or change of field rules.

Authority: Sections 3013 and 3270, Public Resources Code. Reference: Sections 3106, 3203, 3208, 3219, 3222, 3223, 3224, 3226, 3229, 3230, 3270 and 3270.1, Public Resources Code.

§ 1722.1. Acquiring Right to Operate a Well.

Every person who acquires the right to operate any well, whether by purchase, transfer, assignment, conveyance, exchange, or otherwise, shall file an indemnity or cash bond, with his or her own name or company as principal, in the appropriate amount to cover obligations covered under the previous operator's bond.

Authority: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3204, 3205, 3205.1 and 3205.5, Public Resources Code.

§ 1722.1.1. Well and Operator Identification.

(a) Each well location shall have posted in a conspicuous place a clearly visible, legible, permanently affixed sign with the name of the operator, name or number of the lease, and number of the well. These signs shall be maintained on the premises from the time drilling operations cease until the well is plugged and abandoned.

(b) The appropriate Division district deputy may approve existing identification methods if they substantially comply with the intent of this section.

Authority: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3106, Public Resources Code.

§ 1722.2. Casing Program.

Each well shall have casing designed to provide anchorage for blowout prevention equipment and to seal off fluids and segregate them for the protection of all oil, gas, and freshwater zones. All casing strings shall be designed to withstand anticipated collapse, burst, and tension forces with the appropriate design factor provided to obtain a safe operation.

Casing setting depths shall be based upon geological and engineering factors, including but not limited to the presence or absence of hydrocarbons, formation pressures, fracture gradients, lost circulation intervals, and the degree of formation compaction or consolidation. All depths refer to true vertical depth (TVD) below ground level.

Authority: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3219 and 3220, Public Resources Code.

§ 1722.3. Casing Requirements.

(a) Conductor casing. This casing shall be cemented at or driven to a maximum depth of 100 feet. Exceptions may be granted by the appropriate Division district deputy if conditions require deeper casing depth.

(b) Surface casing. Surface casing shall be cemented into or through a competent bed and at a depth that will allow complete well shut-in without fracturing the formation immediately below the casing shoe. As a general guideline, the surface casing for prospect wells shall be cemented at a depth that is at least 10 percent of the proposed total depth, with a minimum of 200 feet and a maximum of 1,500 feet of casing. A second string of surface casing, cemented into or through a competent bed, shall be required in prospect wells if the first string has not been cemented in a competent bed or if unusual drilling hazards exist. In development wells, the surface casing requirement shall be determined on the basis of known field conditions. The appropriate Division district deputy may vary these general surface casing requirements, including the adoption of a field rule, consistent with known geological conditions and engineering factors, to provide adequate protection for freshwater zones and blowout control.

(c) Intermediate casing. This casing may be required for protection of oil, gas, and freshwater zones, and to seal off anomalous pressure zones, lost circulation zones, and other drilling hazards.

(d) Production casing. This casing shall be cemented and, when required by the Division, tested for fluid shutoff above the zone or zones to be produced. The test may be witnessed by a Division inspector. When the production string does not extend to the surface, at least 100 feet of overlap between the production string and next larger casing string shall be required. This overlap shall be cemented and tested by a fluid-entry test to determine whether there is a competent seal between the two casing strings. A pressure test may be allowed only when such test is conducted pursuant to an established field rule. The test may be witnessed by a Division inspector.

Authority: Section 3013, Public Resources Code. Reference: Sections 3106 and 3220, Public Resources Code.

§ 1722.4. Cementing Casing.

Surface casing shall be cemented with sufficient cement to fill the annular space from the shoe to the surface. Intermediate and production casings, if not cemented to the surface, shall be cemented with sufficient cement to fill the annular space to at least 500 feet above oil and gas zones, and anomalous pressure intervals. Sufficient cement shall also be used to fill the annular space to at least 100 feet above the base of the freshwater zone, either by lifting cement around the casing shoe or cementing through perforations or a cementing device placed at or below the base of the freshwater zone. All casing shall be cemented in a manner that ensures proper distribution and bonding of cement in the annular spaces. The appropriate Division district deputy may require a cement bond log, temperature survey, or other survey to determine cement fill behind casing. If it is determined that the casing is not cemented adequately by the primary cementing operation, the operator shall recement in such a manner as to comply with the above requirements. If supported by known geologic conditions, an exception to the cement placement requirements of this section may be allowed by the appropriate Division district deputy.

Authority: Section 3013, Public Resources Code. Reference: Sections 3106, 3220 and 3222-3224, Public Resources Code.

§ 1722.5. Blowout Prevention and Related Well Control Equipment.

Blowout prevention and related well control equipment shall be installed, tested, used, and maintained in a manner necessary to prevent an uncontrolled flow of fluid from a well. Division of Oil, Gas, and Geothermal Resources publication No. MO 7, “Blowout Prevention in California,” shall be used by Division personnel as a guide in establishing the blowout prevention equipment requirements specified in the Division's approval of proposed operations.

Authority: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3219 and 3220, Public Resources Code.

§ 1722.6. Drilling Fluid Program.

The operational procedures and the properties, use, and testing of drilling fluid shall be such as are necessary to prevent the uncontrolled flow of fluids from any well. Drilling fluid additives in sufficient quantity to ensure well control shall be kept readily available for immediate use at all times. Fluid which does not exert more hydrostatic pressure than the known pressure of the formations exposed to the well bore shall not be used in a drilling operation without prior approval of the supervisor.

(a) Before removal of the drill pipe or tubing from the hole is begun, the drilling fluid shall be conditioned to provide adequate pressure overbalance to control any potential source of fluid entry. Proper overbalance shall be confirmed by checking the annulus to ensure that there is no fluid flow or loss when there is no fluid movement in the drill pipe or tubing. The drilling fluid weight, the weight and volume of any heavy slug or pill, and the fact that the annulus was

checked for fluid movement shall be noted on the driller's log. During removal of the drill pipe or tubing from the hole, a hole-filling program shall be followed to maintain a satisfactory pressure overbalance condition.

(b) Tests of the drilling fluid to determine viscosity, water loss, weight, and gel strength shall be performed at least once daily while circulating, and the results of such tests shall be recorded on the driller's log. Equipment for measuring viscosity and fluid weight shall be maintained at the drill site. Exceptions to the test requirements may be granted for special cases, such as shallow development wells in low pressure fields, through the field rule process.

(c) Disposal of drilling fluids shall be done in accordance with Section 1775, Subchapter 2 of these regulations.

Authority: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3219 and 3220, Public Resources Code.

§ 1722.7 Directional Surveys.

The Supervisor may order that a well be directionally surveyed.

Authority: Section 3013, Public Resources Code. Reference: Sections 3106 and 3224, Public Resources Code.

§ 1722.8. Life-of-Well and Life-of-Production Facility Bonding Requirements.

(a) Life-of-well and life-of-production facility bonds may be required by the Supervisor in addition to bond coverage specified in the Public Resources Code Sections 3202, 3204, 3205, 3205.2 and 3206.

(b) The Supervisor may order a life-of-well and/or a life-of-production facility bond for an operator with a history of violating Public Resources Code, Division 3, Chapter 1 and the regulations promulgated thereunder, or that has outstanding liabilities to the state associated with a well or production facility. When determining whether to order a life-of-well and/or a life-of-production facility bond the Supervisor shall consider each of the following:

(1) The severity of the cited violations or civil penalties that the operator has received, and the potential for serious damage to health, safety, or natural resources caused by the violations.

(2) Any ongoing failure to address a cited violation and any pattern of recurring or repeated violations by the operator.

(3) Any evidence that the operator's facility maintenance practices are not in compliance with Public Resources Code, Division 3, Chapter 1 and the regulations promulgated thereunder.

(4) Any failure to comply an order of the Supervisor.

(5) The severity of the spills or leaks that have occurred that the operator is responsible for, and the potential for serious damage to health, safety, or natural resources caused by the spills or leaks.

(6) The extent to which any spills or leaks that the operator is responsible for were the result of a violation of any statute or regulation.

(7) The extent to which any spills or leaks that the operator is responsible for were the result of a lack of training or supervision of the operator's employees or contractors.

(8) The extent to which any spills or leaks that the operator is responsible for were the result of a failure to exercise good oilfield practices.

(9) If the operator has any outstanding liability to the state associated with a well or production facility, whether the liability is the result of a violation of a statute or regulations, and whether the operator is making a good faith effort to repay the liability.

(c) The Supervisor shall establish a life-of-well bond amount to cover the cost to properly plug and abandon each well, including site restoration, and the cost to finance a spill response and incident cleanup.

(1) The Supervisor shall estimate the cost to plug and abandon based on the wells condition, total depth, required abandonment operations, site restoration prescribed by regulation, and similar well abandonments within the field or lease.

(2) The life-of-well bond coverage for a well shall be no less than the amount prescribed in Public Resources Code Section 3204.

(3) The Supervisor shall annually review the amount of a life-of-well bond and, if needed, establish a new bond amount to ensure proper plugging and abandonment of the well, and the financing of spill response and incident cleanup.

(d) The Supervisor shall establish a life-of-production facility bond amount to cover the costs to decommission each production facility, and the cost to finance a spill response and incident cleanup.

(1) The Supervisor shall estimate the cost based on the number and volume of tanks, the estimated volume and types of fluids in the tanks, attendant facility equipment and stored materials onsite, the cost of similar facility decommissioning and removal projects, and any estimates received from licensed demolition contractors.

(2) The Supervisor shall annually review the amount of a life-of-production facility bond and, if needed, establish a new bond amount to ensure the safe decommissioning of each production facility, and the financing of spill response and incident cleanup.

(e) Upon failure of an operator to perform appropriate spill response and cleanup, or upon failure of an operator to comply with corrective action as required in an order of the Supervisor, the Supervisor may perform work in accordance with Public Resources Code Section 3226. The Supervisor may levy upon a life-of-well or life-of-production facility bond to pay the cost of the work.

(f) The operator shall replenish the amount levied from a life-of-well or life-of-production facility bond within 30 days from when the Supervisor levied the bond.

Authority: Sections 3013 and 3270.4, Public Resources Code. Reference: Sections 3204, 3226 and 3270.4, Public Resources Code.

§ 1722.8.1. Bonding Language.

The conditions of a bond required under Public Resources Code Section 3270.4 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, production facility, or the property or properties of the principal, or assessed against the well, production facility, 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."

Authority: Sections 3013 and 3270.4, Public Resources Code. Reference: Section 3270.4, Public Resources Code.

§ 1722.9. Spill Contingency Plan Requirements.

A spill contingency plan shall be designed to prevent and respond to unauthorized releases and contain the following:

(a) A list of the operator's 24-hour emergency contact telephone numbers. The operator's emergency contact shall be prepared to provide Division staff complete information about the production facility emergency shutdown procedures, including a list of safety shutdown devices including, but not limited to, kill switches, emergency shut-down devices, or master valves.

(b) A list of available personal safety equipment, including location and maintenance frequency.

(c) A one page quick-action checklist for use during initial stages of a spill response.

(d) A list of required local, state and federal agency notifications with telephone numbers, including, but not limited to, the phone number for the appropriate Division district office and the phone number for reporting spills to the California Emergency Management Agency.

(e) A list of control and/or cleanup equipment available onsite or locally, with contact procedures.

(f) A map of the production facilities covered by the plan, including:

(1) Labeling of all permanent tanks, equipment, and pipelines. If locations are not known, the most probable location shall be shown and identified as a probable location.

(2) Identification of access roads for emergency response.

(3) Labeling of all out-of-service equipment.

(4) Labeling of all sumps and catch basins.

(5) Volume of all tanks and storage containers covered by the plan, listing the type of fluid stored.

(6) All designated waterways within one-quarter mile of the facility.

(7) Location of secondary containment with access routes.

(8) Topography or drainage flow direction.

(9) All storm drains within one-quarter mile of the site.

(10) A fluid flow schematic.

(g) A list of all chemicals for which a Material Safety Data Sheet is required, and the location of the Material Safety Data Sheets for those chemicals.

(h) Procedures for making regular facility inspections, and maintenance of related inspection records.

(i) Maximum and typical produced fluid processing rates.

(j) Typical volumes of liquids stored at the facility.

(k) A list of additional containment features for production facilities in drainages with direct access to waterways or urban areas as determined necessary by the Supervisor.

(l) A list of corrosion prevention or corrosion monitoring techniques utilized.

(m) A description of all installed sensor and alarm systems. The sensor and alarm systems to be described include, but are not limited to:

(1) Tank overfill.

(2) High and low pressure for pipelines and pressure vessels.

(3) Fire sensors.

(4) H2S detectors.

(5) Gas detectors.

(n) A description of the training provided to implement the plan.

Authority: Section 3013, Public Resources Code. Reference: Sections 3106 and 3270.1, Public Resources Code.

§ 1723. Plugging and Abandonment-General Requirements.

(a) Cement Plugs. In general, cement plugs will be placed across specified intervals to protect oil and gas zones, to prevent degradation of usable waters, to protect surface conditions, and for public health and safety purposes. Cement may be mixed with or replaced by other substances with adequate physical properties, which substances shall be approved by the Supervisor. The application of these mixed materials and other substances to particular wells shall be at the discretion of the district deputy.

(b) Hole Fluid. Mud fluid having the proper weight and consistency to prevent movement of other fluids into the well bore shall be placed across all intervals not plugged with cement, and shall be surface poured into all open annuli.

(c) Plugging by Bailer. Placing of a cement plug by bailer shall not be permitted at a depth greater than 3,000 feet. Water is the only permissible hole fluid in which a cement plug shall be placed by bailer.

(d) Surface Pours. A surface cement-pour shall be permitted in an empty hole with a diameter of not less than 5 inches. Depth limitations shall be determined on an individual well basis by the district deputy.

(e) Blowout Prevention Equipment. Blowout prevention equipment may be required during plugging and abandonment operations. Any blowout prevention equipment and inspection requirements determined necessary by the district deputy shall appear on the approval to plug and abandon issued by the Division.

(f) Junk in Hole. Diligent effort shall be made to recover junk when such junk may prevent proper plugging and abandonment either in open hole or inside casing. In the event that junk cannot be removed from the hole and fresh-saltwater contacts or oil or gas zones penetrated below cannot therefore be properly abandoned, cement shall be downsqueezed through or past the junk and a 100-foot cement plug shall be placed on top of the junk. If it is not possible to downsqueeze through the junk, a 100-foot cement plug shall be placed on top of the junk.

(g) Lost Radioactive Tool. In the event that a source containing radioactive material cannot be retrieved from the hole, a 100-foot standard color dyed (red iron oxide or equivalent red

cement dye) cement plug shall be placed on top of the radioactive tool, and a whipstock or other approved deflection device shall be placed on top of the cement plug to prevent accidental or intentional mechanical disintegration of the radioactive source. In addition, the operator shall comply with the California Department of Health Services regulations in Section 30346 of Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 7, of the California Code of Regulations.
Authority: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3219 and 3228, Public Resources Code.

§ 1723.1. Plugging of Oil or Gas Zones.

(a) Plugging in an Open Hole. A cement plug shall be placed to extend from the total depth of the well or from at least 100 feet below the bottom of each oil or gas zone, to at least 100 feet above the top of each oil or gas zone.

(b) Plugging in a Cased Hole. All perforations shall be plugged with cement, and the plug shall extend at least 100 feet above the top of a landed liner, the uppermost perforations, the casing cementing point, the water shut-off holes, or the oil or gas zone, whichever is highest.

(c) Special Requirements. Special requirements may be made for particular types of hydrocarbon zones, such as:

(1) Fractured shale or schist;
(2) Massive sand intervals, particularly those with good vertical permeability;
(3) Any depleted productive interval more than 100 feet thick; or
(4) Multiple zones completed in a well.

As a minimum for an open-hole plugging and abandonment, the special requirement shall include a cement plug extending from at least 100 feet below the top of the oil or gas zone to at least 100 feet above the top of the zone.

As a minimum for a cased-hole plugging and abandonment, the special requirement shall include a cement plug extending from at least 25 feet below the top of the uppermost perforated interval to at least 100 feet above the top of the perforations, the top of the landed liner, the casing cementing point, the water shutoff holes, or the zone, whichever is highest.

(d) Bridge Plug. In a multiple zone completion, a single bridge plug above the lowermost zone may be allowed in lieu of cement through that zone if the zone is isolated from the upper zones by cement behind the casing. Subsequent bridge plugs are not allowed unless separated by cement plugs meeting the requirements of Section 1723.1(b). Temporary bridge plugs must be removed and replaced with cement plugs prior to shallower zone completions or well abandonment.
Authority: Sections 3013 and 3106, Public Resources Code. Reference: Section 3228, Public Resources Code.

§ 1723.2. Plugging for Freshwater Protection.

(a) Plugging in Open Hole.

(1) A minimum 200-foot cement plug shall be placed across all fresh-saltwater interfaces.

(2) An interface plug may be placed wholly within a thick shale if such shale separates the freshwater sands from the brackish or saltwater sands.

(b) Plugging in a Cased Hole.

(1) If there is cement behind the casing across the fresh-saltwater interface, a 100-foot cement plug shall be placed inside the casing across the interface.

(2) If the top of the cement behind the casing is below the top of the highest saltwater sands, squeeze-cementing shall be required through perforations to protect the freshwater deposits. In addition, a 100-foot cement plug shall be placed inside the casing across the fresh-saltwater interface.

(3) Notwithstanding other provisions of this section, the district deputy may require or allow a cavity shot immediately below the base of the freshwater sands. In such cases, the hole shall be cleaned out to the estimated bottom of the cavity and a 100-foot cement plug shall be placed in the casing from the cleanout point.

(c) Special Plugging Requirements. Where geologic or groundwater conditions dictate, special plugging procedures may be specified to prevent contamination of usable waters by downward percolation of poor quality surface waters, separate water zones of varying quality, and isolate dry sands that are in hydraulic continuity with groundwater aquifers.

Authority: Section 3013, Public Resources Code. Reference: Sections 3106 and 3228, Public Resources Code.

§ 1723.3. Plugging at a Casing Shoe.

If the hole is open below a shoe, a cement plug shall extend from at least 50 feet below to at least 50 feet above the shoe. If the hole cannot be cleaned out to 50 feet below the shoe, a 100-foot cement plug shall be placed as deep as possible.

Authority: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3106 and 3228, Public Resources Code.

§ 1723.5. Surface Plugging.

The hole and all annuli shall be plugged at the surface with at least a 25-foot cement plug. The district deputy may require that inner strings of uncemented casing be removed to at least the base of the surface plug prior to placement of the plug.

All well casing shall be cut off at least 5 feet but no more than 10 feet below the surface of the ground. The district deputy may approve a different cut-off depth, as conditions warrant, including but not limited to excavation or grading operations for construction purposes. As defined in Section 1760(j), a steel plate at least as thick as the outer well casing shall be welded around the circumference of the casing at the top of the casing, after Division approval of the surface plug. The steel plate shall show the well's identification, indicated by the last five digits of the API well number.

Authority: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1723.6. Recovery of Casing.

(a) Approval to recover all casing possible will be given in the plugging and abandonment of wells where subsurface plugging can be done to the satisfaction of the district deputy.

(b) The hole shall be full of fluid prior to the detonation of any explosives in the hole. Such explosives shall be utilized only by a licensed handler with the required permits.

Authority: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3106 and 3228, Public Resources Code.

§ 1723.7. Inspection of Plugging and Abandonment Operations.

Plugging and abandonment operations that require witnessing by the Division shall be witnessed and approved by a Division employee. When discretion is indicated by these regulations, the district deputy shall determine which operations are to be witnessed.

(a) Blowout prevention equipment -may inspect and witness testing of equipment and installation.

(b) Oil and gas zone plug -may witness placing and shall witness location and hardness.

(c) Mudding of hole -may witness mudding operations and determine that specified physical characteristics of mud fluid are met.

(d) Freshwater protection:

(1) Plug in open hole -may witness placing and shall witness location and hardness. Plug in cased hole -shall witness placing or location and hardness.

(2) Cementing through perforations -may witness perforating and shall witness cementing operation.

(3) Cavity shot -may witness shooting and shall witness placing or location and hardness of required plug.

(e) Casing shoe plug -shall witness placing or location and hardness.

(f) Casing stub plug -may witness placing or location and hardness.

(g) Surface plug -may witness emplacement and shall witness or verify location.

(h) Environmental inspection (after completion of plugging operations) -shall determine that Division environmental regulations (California Code of Regulations, Title 14, Subchapter 2) have been adhered to.

Authority: Sections 3013 and 3106, Public Resources Code. Reference: Section 3228, Public Resources Code.

§ 1723.8. Special Requirements.

The Supervisor, in special cases, may set forth other plugging and abandonment requirements or may establish field rules for the plugging and abandonment of wells. Such cases include, but are not limited to:

(a) The plugging of a high-pressure saltwater zone.

(b) Perforating and squeeze-cementing previously uncemented casing within and above a hydrocarbon zone.

(c) The plugging of particular zones or specifying cleanout intervals within a wellbore.

Authority: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1723.9. Testing of Idle Wells.

Operators shall comply with all of the requirements in Section 1772.1 for the testing of idle wells.

Note: Authority cited: Section 3013, Public Resources Code. Reference: Sections 3106 and 3206.1, Public Resources Code.

§ 1724. Required Well Records

The operator of any well drilled, redrilled, deepened, or reworked shall keep, or cause to be kept, an accurate record of each operation on each well including, but not limited to, the following, when applicable:

(a) Log and history showing chronologically the following data:

(1) Character and depth of all formations, water-bearing strata, oil- and gas-bearing zones, lost circulation zones, and abnormal pressure zones encountered.

(2) Casing size, weight, grade, type, condition (new or used), top, bottom, and perforations; and any equipment attached to the casing.

(3) Tubing size and depth, type and location of packers, safety devices, and other tubing equipment.

(4) Casing pressure tests and pressure tests of the casing-tubing annulus, including date, duration, pressure, and percent bleed-off.

(5) Hole sizes.

(6) Cementing and plugging operations, including date, depth, slurry volume and composition, fluid displacement, pressures, calculated or actual fill, and downhole equipment.

(7) Drill-stem, leak-off, or other formation tests, including date, duration, depth, pressures, and recovery (volume and description).

(8) BOPE installation, inspections, and pressure tests.

(9) Water shutoff and lap tests of casing, including date, duration, depth, and results.

(10) Sidetracked casing, tools or other material, collapsed or bad casing, holes in casing, and stuck drill pipe, tubing, or other junk in casing or open hole.

(11) Depth and type of all electrical, physical, or chemical logs, tests, or surveys made.

(12) Production or injection method and equipment.

(b) Core record showing the depth, character, and fluid content, so far as determined, of all cores, including sidewall samples.

(c) Such other information as the Supervisor may require for the performance of his or her statutory duties.

Authority: Sections 3013 and 3107, Public Resources Code. Reference: Sections 3106, 3107, 3203, 3210 and 3214, Public Resources Code.

§ 1724.1. Records to Be Filed with the Division.
Two true and reproducible copies of the well summary, core record, and history, and all electrical, physical and chemical logs, tests and surveys run, including mud logs shall be filed with the Division within 60 days after the completion, plugging and abandonment, or suspension of operations of a well. Dipmeter surveys shall be submitted in a form indicating the computed direction and amount of dip.
Authority: Sections 3013, 3106 and 3107, Public Resources Code. Reference: Sections 3107, 3215 and 3216, Public Resources Code.

§ 1724.3. Well Safety Devices for Critical Wells.
Certain wells designated by the Supervisor, that meet the definition of "critical" pursuant to Section 1720(a) and have sufficient pressure to allow fluid-flow to the surface, shall have safety devices as specified by the Supervisor, installed and maintained in operating condition. A description of such safety devices follows:

(a) Surface safety devices.

(1) Fail-close, well shut-in or shut-down devices. Wellhead assemblies shall be equipped with an automatic fail-close valve.

(2) High-low pressure sensors in all flowlines, set to actuate shut in or shut down of the well(s) in the event of abnormal pressures in the flowlines.

(3) Check valves in all headers, except for gas storage wells, to prevent backflow in the event of flowline failure. All flowlines and valves shall be capable of withstanding shut-in wellhead pressure, unless protected by a relief valve with connections to bypass the header.

(4) Fire detection devices, such as fusible plugs, at strategic points in pneumatic, hydraulic, and other shut-in control lines in fire hazard areas.

(5) Remote, manually operated, quick operating shut-in controls at strategic points.

(b) Subsurface safety devices.

(1) A surface-controlled, subsurface tubing safety valve installed at a depth of 50 feet or more below the ground level. For shut-in wells capable of flowing, a tubing plug may be installed in lieu of a subsurface tubing safety valve. Subsurface safety devices shall be installed, adjusted, and maintained to ensure reliable operation. If for any reason a subsurface safety device is removed from a well, a replacement subsurface safety device or tubing plug shall be promptly installed. Any well in which a subsurface safety device or tubing plug is installed shall have the tubing-casing annulus sealed at or below the valve- or plug-setting depth. A bypass-type packer that will seal the annulus on manual or automatic operation of the tubing subsurface safety device will meet this requirement.
Authority: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3106 and 3219, Public Resources Code.

§ 1724.4. Testing and Inspection of Safety Devices.

(a) All installed well safety devices, required pursuant to Section 1724.3 of this article, shall be tested at least every six (6) months, as follows:

(1) Flow line pressure sensors shall be tested for proper pressure settings.

(2) Automatic wellhead safety valves shall be tested for reliable operation and holding pressure.

(3) Subsurface safety devices shall be tested for reliable operation.

(4) Tubing plugs or packers shall be tested for holding pressure.

(b) The appropriate Division district office shall be notified before such tests are made, as these tests may be witnessed by a Division inspector. Test failures not immediately repaired or corrected and not witnessed by a Division inspector shall be reported to the Division within 24 hours.

(c) The Supervisor may establish a special testing schedule for safety devices other than that specified in this section, based upon equipment performance or special conditions.

(d) The operator shall maintain records, available to Division personnel during business hours, showing the present status and history of each well safety device installed, including dates, details and results of inspections, tests, repairs, reinstallations, and replacements.

Authority: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3106 and 3219, Public Resources Code.

Article 4. Underground Injection Control

§ 1724.5 Purpose, Scope, and Applicability

The purpose of this article is to set forth regulations governing underground injection projects and injection wells. This article applies to underground injection projects and injection wells in existence prior to the effective date of this article, as well as new underground injection projects and injection wells. Underground injection projects and injection wells are not subject to the requirements of Article 5, Sections 1726 through 1726.10.

Note: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1724.6. Approval of Underground Injection Projects.

(a) Operators shall obtain a Project Approval Letter from the Division for each underground injection project before any injection occurs as part of the underground injection project. The operator requesting approval for such a project must provide the appropriate Division district deputy with the data specified in Section 1724.7 and any data that, in the judgment of the Division, are pertinent and necessary for the proper evaluation of the project. When reviewing a proposal for a new underground injection project, the Division will consult with the State Water Resources Control Board or the Regional Water Quality Control Board.

(b) The Project Approval Letter shall specify the location and nature of the underground injection project, as well as the conditions of the Division's approval. The Project Approval Letter shall include identification of the approved injection zone for the underground injection project, and the approved injection zone shall not include a USDW. The Division may specify a limited duration of approval for an underground injection project in the Project Approval Letter. All underground injection projects shall be operated in accordance with the requirements of this subchapter and the terms and conditions of the current Project Approval Letter.

(c) Any subsequent modification of an underground injection project requires the prior approval of the Division and shall be memorialized in either an addendum to the Project Approval Letter or a revised Project Approval Letter.

(d) The Division will review existing underground injection projects periodically, but not less than once every three years, to verify compliance with the requirements of this subchapter and the terms and conditions of the Project Approval Letter, and will periodically review the terms and conditions of the Project Approval Letter to ensure that they are effectively preventing damage to life, health, property, and natural resources. Project Approval Letters are subject to suspension, modification, or rescission by the Division.

(e) If the Division determines that the operation of an underground injection project is inconsistent with this subchapter or the terms and conditions of a current Project Approval Letter, or otherwise poses a threat to life, health, property, or natural resources, then upon written notice from the Division injection operations shall cease immediately, or as soon as it is safe to do so. Underground injection projects or injection operations suspended upon written notice from the Division or for any of the reasons specified under Section 1724.13 shall not resume without subsequent written approval from the Division.

(f) Within 60 days after transfer of an underground injection project to a new operator, the new operator shall meet with Division staff to ensure a complete understanding of the applicable requirements and terms and conditions of the Project Approval Letter.

Note: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1724.7. Project Data Requirements.

(a) An underground injection project shall be supported by data filed with the Division that demonstrates to the Division's satisfaction that injected fluid will be confined to the approved injection zone and that the underground injection project will not cause damage to life, health, property, or natural resources. The engineering study, geologic study, and injection plan described in subdivisions (a)(1) through (a)(3) shall demonstrate to the Division's satisfaction that injected fluid will not migrate out of the approved injection zone through another well, geologic structure, fault, fracture, fissure, hole in the casing, or other pathway, considering project duration, volume of fluid to be injected, and other relevant factors. The operator is responsible for ensuring that the data are current and accurately reflect the project setting and operation throughout the operating life of the project. The data filed with the Division shall include, at a minimum:

(1) An engineering study, including but not limited to:

(A) A description of how the area of review was determined, including calculations, variables, citations, and assumptions.

(B) A map of the area of review showing the location of the following:

(i) All wells within and adjacent to the boundary of the area of review;

(ii) All water supply wells that are within the area of review and identified in public records or otherwise known to the operator;

(iii) Any underground disposal horizons, mining, and other subsurface industrial activities not associated with oil and gas production within the area of review, to the extent such information is publicly available or otherwise known to the operator; and

(iv) Traces of the geologic cross sections provided under subdivision (a)(2)(E).

(C) A compendium of the following information:

(i) For all wells depicted in subdivision (a)(1)(B) (including water supply wells to the extent information is known or publicly available), the API numbers, or other identifying information for wells that do not have API numbers, and the wellbore paths, total depths, and depths of completion interval(s) of the wells;

(ii) The type and status of water supply wells depicted in subdivision (a)(1)(B); and

(iii) All data specified in Section 1724.7.1, provided in the form of graphical casing diagrams or flat-file data sets, for all wells that are within the area of review and that are completed in or penetrating the injection zone for the underground injection project or a deeper zone, including directionally drilled wells that intersect the area of review in the injection zone or a deeper zone.

(D) The planned well-drilling and plugging-and-abandonment program to complete the project, including a flood-pattern map, if applicable, showing all injection, production, and plugged and abandoned wells, and unit boundaries.

(2) A geologic study, including but not limited to:

(A) Reservoir characteristics of the injection zone, such as porosity, permeability, average thickness, areal extent, fracture gradient, original and present temperature and pressure, and original and residual oil, gas, and water saturations. The scope of the geologic characterization shall encompass the caprock and sealing mechanisms, the injection zone including the vertical interval above and below the approved injection zone, and the areas where potential migration of fluid or entrapment of migrated fluid could occur.

(B) Reservoir fluid data for the injection zone, such as oil gravity and viscosity, water quality, presence and concentration of non-hydrocarbon components in the associated gas (such as hydrogen sulfide), and specific gravity of gas. Liquid analysis of the reservoir fluid shall be performed in accordance with Section 1724.7.2.

(C) Structural contour map drawn on a geologic marker at or near the top and base of each injection zone in the area of review, indicating faults and any lateral containment features. If faults are identified, the operator must address whether or not the faults are capable of confining fluid to the approved injection zone, and any geologic features that could result in the migration of fluid out of the approved injection zone.

(D) Isopach map of each injection zone or subzone in the area of review.

(E) At least two geologic cross sections in the area of review through at least three wells, including one injection well. As near as possible, one of the geologic cross sections shall be along strike and the other geologic cross section shall be perpendicular to strike. The cross sections shall extend from the base of the deepest production or injection zone to surface and indicate the location of the approved injection zone, the base of freshwater, and the base of the USDW.

(F) Representative electric log to a depth below the deepest producing or injection zone, whichever is deeper, identifying all geologic units, formations, USDWs, freshwater aquifers, and oil or gas zones. The electric log shall identify the API number of the well that was logged.

(3) An injection plan, including but not limited to:

(A) Statement of primary purpose of the project.

(B) A map showing injection facilities related to the project, and piping and instrumentation diagram(s) for the injection facilities.

(C) Statement of the anticipated project duration, anticipated daily rate of injection (by well), and anticipated cumulative net volume of fluid to be injected.

(D) Identification of all wells that are part of the underground injection project, including injection wells, affected production wells, water source wells, observation or other wells, and any planned wells to the extent known. The depths of water source wells shall also be provided.

(E) Monitoring system, including methods or standard operating procedures to be utilized to ensure that no damage is occurring and that the injection fluid is confined to the approved injection zone. In the event the Division, the State Water Resources Control Board, or the Regional Water Quality Control Board requires groundwater monitoring in relation to the underground injection project, or as a condition of project approval, the operator shall consult with the State Water Resources Control Board or the Regional Water Quality Control Board and provide the Division with documentation and the results of such consultation.

(F) Method of injection, including such information as injection string configuration and bottom-hole assembly.

(G) List of cathodic protection or other corrosion prevention measures employed for plant, lines, and wells, if such measures are warranted.

(H) Identification of the source(s) of the injection liquid and an analysis of the injection liquid, in accordance with Section 1724.7.2.

(4) All data supporting the determination under Section 1724.10.3 of the maximum allowable surface injection pressure for each injection well in the underground injection project, including all calculations, variables, citations, and assumptions.

(5) Copies of letters of notification sent to offset operators.

(6) Any other data that, in the judgment of the Division, are pertinent and necessary for the proper evaluation of the underground injection project. Examples of such data are: isogor maps, water-oil ratio maps, isobar maps, three-dimensional geologic models, reservoir simulation results, isopach maps of the confining layers, equipment diagrams, and safety programs.

(b) The addition of an injection well to an underground injection project is subject to approval by the Division, and shall be indicated in a summary list of approved injection wells associated with the underground injection project, which shall be referenced by the Project Approval Letter for the underground injection project. When an injection well is added to an underground injection project, the operator shall provide the Division with a brief description of how the injection well will impact the underground injection project, any data relevant to the addition of

the injection well, and an update to the data previously provided to the Division if relevant conditions have changed or if more accurate data have become available. The addition of an injection well does not require the operator to submit data previously provided to the Division.

(c) All data required under this section shall be submitted to the Division digitally. If requested by the Division, a hard copy of specified data shall also be submitted. All maps, diagrams, and exhibits required in subdivision (a) shall be clearly and appropriately labeled, such as to title, scale, and purpose, and shall clearly identify wells, boundaries, zones, contacts, and other relevant data.

(d) All data required under this section shall be submitted to the Division with a cover page including a statement that appropriate licensed professionals, whose signatures and stamps appear at the bottom of the page, are responsible for all data, if any, subject to the requirements of Business and Professions Code sections 6735, 7835, or 7835.1. If the operator determines that the submission does not include material subject to the requirements of Business and Professions Code sections 6735, 7835, or 7835.1, the cover page shall so indicate, and shall provide the name(s) and signature(s) of the individual(s) responsible for preparing the submission.

(e) The Division may accept data alternative to what is required under subdivision (a), provided that the operator demonstrates to the Division's satisfaction all of the following:

(1) It would be an unreasonable burden to provide the data specified in subdivision (a);

(2) The alternative data provided by the operator accomplishes the same purpose as the data it would replace;

(3) The underground injection project is, on whole, supported by data demonstrating that injected fluid will be confined to the approved injection zone, and that the underground injection project conforms to the requirements of this subchapter and will not cause damage to life, health, property, or natural resources.

Note: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1724.7.1 Casing Diagrams

(a) Casing diagrams submitted under the requirements of this article shall include all of the following data:

(1) Operator name, lease name, well number, and API number of the well;

(2) Date the well was spudded;

(3) Ground elevation from sea level;

(4) Reference elevation (i.e., rig floor or Kelly bushing);

(5) Base of freshwater;

(6) Base of the lowermost USDW penetrated by the well;

(7) Sizes, grades, connection type, and weights of casing;

(8) Depths of shoes, stubs, and liner tops;

(9) Depths of perforations and perforation intervals, open-hole completions, water shutoff holes, cement ports, cavity shots, cuts, type and extent of casing damage, type and extent of

junk or fish, and any other feature that influences flow in the well or may compromise the mechanical integrity of the well;

(10) Information regarding equipment in the well such as subsurface safety valves, packers, and gas lift mandrels;

(11) Diameter and depth of hole for all drilled intervals;

(12) Identification of cement plugs inside casings, including locations of the top and bottom of cement plugs;

(13) Identification of cement fill behind casings, including locations of the top and bottom of cement fill;

(14) Type and weight (density) of fluid between cement plugs; and

(15) Depths and names of the formations, zones, and markers penetrated by the well, including the top and bottom of both the injection zone and confining layer(s) for the underground injection project(s).

(b) Each casing diagram submitted to the Division shall be accompanied by documentation of the following:

(1) All steps of cement yield and cement calculations performed;

(2) All information used to calculate the cement slurry (volume, density, yield), including but not limited to, cement type and additives, for each cement job completed in each well; and

(3) The wellbore path, providing measured depth and both inclination and azimuth measurements.

(c) When multiple boreholes are drilled in a well, all of the information listed in this section is required for both the original hole and for any subsequent redrilled or sidetracked wellbores.

(d) Measured depth and true vertical depth shall be provided for all depths required under subdivision (a).

(e) Operators may satisfy the requirements of section 1724.7(a)(1)(C)(iii) by submitting graphical casing diagrams or a flat-file data set containing all of the information described in this section.

Note: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1724.7.2 Liquid Analysis

(a) Liquid analysis required under this article shall include testing for all of the following: total dissolved solids; total petroleum hydrocarbon as crude oil; major cations (Ca, Mg, Na, K, Fe, Mn, Sr, B); major anions (Cl, SO_4, HCO_3, CO_3, Br, I); total alkalinity and hydroxide; electrical conductance; pH; and temperature.

(b) The Division may require testing for additional constituents on a project-specific basis. Any additional constituents shall be listed in the Project Approval Letter for the project.

(c) To ensure the liquid analysis required under Section 1724.7(a)(2)(B) is representative of the reservoir liquid in its native condition, if feasible the liquid analyzed shall be either sampled from the injection zone itself prior to commencement of any injection into the reservoir or sampled from an analogous reservoir that has not already received injection fluid. The

representative sample shall be recovered after all completion and drilling fluid has been circulated from the wellbore.

(d) To ensure the liquid analysis required under Sections 1724.7(a)(3)(H) and 1724.10(d) is representative of the liquid actually injected, the liquid to be analyzed shall be sampled after all additives (if any) are added to the liquid, and after all treatment or separation processes (if any).

(e) Liquid analysis required under this article shall be performed by a laboratory that is certified by the State Water Resources Control Board environmental laboratory accreditation program. The performing laboratory shall submit the data and analysis to the Division directly, using a digital format.

Note: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1724.8. Evaluation of Wells Within the Area of Review.

(a) An underground injection project shall not cause or contribute to the migration of fluid outside the approved injection zone, or otherwise have an adverse effect on the underground injection project or cause damage to life, health, property, or natural resources. The following requirements apply, at minimum and subject to augmentation by the Division on a project-specific basis, to ensure that wells within the area of review will not be a potential conduit for fluid migration outside the approved injection zone:

(1) All wells within the area of review that penetrate the injection zone for the underground injection project or a deeper zone, including directionally drilled wells that intersect the area of review in the injection zone or a deeper zone, shall be evaluated for the potential to allow fluid to migrate outside of the approved injection zone. The Division's evaluation for the potential for a well to allow fluid migration will include evaluation of the cementing records. Where cementing records are inadequate or unreliable, the Division may require a cement evaluation log. The operator should identify, and the Division confirm, wells which may require integrity testing, well logging, or monitoring in order to provide the requisite assurances that such wells will not act as conduits for fluid migration. The Division may require wells be examined, remediated, plugged and abandoned, or monitored as a condition of approval for an underground injection project if the Division is concerned that the well has the potential to allow fluid to migrate outside of the approved injection zone.

(2) Plugged and abandoned wells within the area of review shall have cement as specified in Section 1723.1. The Division may require plugged and abandoned wells be re-entered, examined, re-plugged and abandoned, or monitored as a condition of approval for an underground injection project if the Division is concerned that the well has the potential to allow fluid to migrate outside of the approved injection zone.

(3) If a plugged and abandoned well within the area of review does not meet the plugging specifications of subdivision (a)(2), the Division may approve an alternative demonstration that the well will not be a potential conduit for fluid migration outside the approved injection zone. The Division's approval of such an alternative demonstration shall be supported by written findings by the Division that identify each plugged and abandoned well in the area of review that does not meet the cement specification of subdivision (a)(2), specify how

the well(s) do not meet the requirements of subdivision (a)(2), and identify the bases for the Division's approval of the alternative demonstration.
Note: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1724.10. Filing, Notification, Operating, and Testing Requirements for Underground Injection Projects.

(a) The appropriate Division district deputy shall be notified of any anticipated changes in an underground injection project resulting in inconsistency with the current conditions of approval, such as: expansion of the project, change of injection interval, or increase in maximum allowable surface injection pressure. Such changes shall not be carried out without prior written approval of the Division in accordance with Section 1724.6.

(b) In addition to the notice of intention that may be required under Public Resources Code section 3203, any addition of an injection well to an underground injection project, including the conversion of a well without alteration of casing, requires the prior written approval of the Division in accordance with Section 1724.6. The operator shall notify the Division and conduct testing as required under Section 1724.10.1 if the packer or tubing in an injection well is set, reset, moved, or changed.

(c) An injection report on a current Division form or in a digital format acceptable to the Division shall be filed with the Division on or before the last day of each month, for the preceding month.

(d) A representative chemical analysis of the liquid being injected, as specified in Section 1724.7.2, shall be made and filed with the Division whenever the source of injection liquid is changed, or as requested by the Division. For the purposes of this subdivision, the source of injection is changed if a contributing source is added to or removed from the injection liquid, or if there is a significant change to the relative contribution of individual sources such that the last chemical analysis is not representative of the liquid being injected.

(e) For each underground injection project that includes an injection well with open perforations located within 500 linear feet of the screen or perforations of a water supply well, the operator shall provide to the Division in digital format on a yearly basis all of the information listed in subdivisions (e)(1) through (e)(4). On a project-specific or well-specific basis, the Division may specify a distance greater than 500 feet as the distance that triggers the requirements of this subdivision if, in the Division's judgment, geological conditions or the relative location of any water supply well warrants the additional data collection listed in subdivisions (e)(1) through (4). The applicability of this subdivision shall be based on a diligent search by the operator, including consultation of public records, and is not triggered by water source wells. When applicable, the following information shall be provided:

(1) A water treatment process flow diagram depicting all physical and chemical treatment processes applied to the injection fluid, from its source to the injection well;

(2) The safety data sheet for each chemical additive emplaced in injection wells within the underground injection project, and for each chemical added to the fluid to be injected from the time the fluid is first obtained to the time it is injected;

(3) The project-aggregate volume or weight of each additive reported under subdivision (e)(2); and

(4) A brief description of the intended purpose of each additive reported under subdivision (e)(2).

(f) All injection piping, valves, and facilities shall meet or exceed design standards for the maximum allowable injection pressure or the maximum pressure the equipment will be subjected to, and shall be maintained in a safe and leak-free condition.

(g) Except as provided in this subdivision below, all injection wells shall be equipped with tubing and packer, with the packer isolating the injection zone set no more than 100 feet above the approved injection zone. The packer shall not be set below open perforations if the packer is set within the approved zone of injection. The operator may use a technical equivalent of a packer instead of a packer, provided that the Division has approved the alternative as an effective means to isolate the production tubing from the casing. Injection wells equipped with tubing and packer may inject through the tubing, but not through the casing-tubing annulus unless the operator has written approval from the Division. Tubing and packer are not required for the following:

(1) Steamflood and cyclic steam injection wells;

(2) Any injection well that the Division approves for operation without tubing and packer and for which the operator demonstrates based on documented evidence, that:

(A) The well does not penetrate any USDW;

(B) The well is completed with more than one string of casing cemented to the satisfaction of the Division below the base of the lowermost USDW penetrated by the well; or

(C) There is other justification for a determination that all USDW, hydrocarbon, and anomalous zones can be protected without the use of tubing and packer.

(3) An injection well that was not required to be equipped with tubing and packer prior to April 1, 2019, is not subject to the requirements of this subdivision until April 1, 2021.

(h) Surface injection pressure of an injection well shall not exceed the maximum allowable surface pressure, as determined under Section 1724.10.3.

(i) Mechanical integrity testing must be performed on all injection wells to ensure the injected fluid is confined to the approved injection zone. Mechanical integrity testing shall consist of a two-part demonstration in accordance with Sections 1724.10.1 and 1724.10.2.

(1) The operator shall notify the appropriate Division district office at least 48 hours before performing any testing under Sections 1724.10.1 and 1724.10.2 so that Division staff may witness the operations, unless the Division approves shorter notice. This notification requirement also applies to subsequent schedule changes the operator may make for a previously noticed test.

(2) Digital copies of surveys and test results shall be submitted to the Division within 60 days of the tests.

(3) Injection wells shall be constructed and maintained to allow for compliance with the testing described in Sections 1724.10.1 and 1724.10.2.

(4) Any injection well, including a well not actively injecting, that is not tested as required under Sections 1724.10.1 and 1724.10.2 shall automatically lose approval to inject, and subsequent written approval from the Division is required to reinitiate injection.

(5) If testing conducted under Sections 1724.10.1 or 1724.10.2 is not successful, then the operator shall undertake remedial work or conduct further testing as necessary to satisfy the Division that the well will not damage life, health, property, or natural resources. In some instances, plugging and abandonment of the well may be necessary to ensure that the well will not damage life, health, property, or natural resources. The necessary remedial work or testing shall be completed within 180 days, unless a longer timeframe is approved by the Division. The requirements of this subdivision are in addition to any other penalty or remedial requirement that may be imposed by the Division.

(j) Injection wells and related facilities shall be monitored, as specified in the Project Approval Letter for each underground injection control project, in order to allow for the discovery and correction of abnormal operating conditions.

(k) Operators of cyclic steam injection wells shall maintain records in machine-readable format of the number, dates, duration, and volume of fluid injected of each injection cycle performed on each cyclic steam injection well. Such records shall be maintained as long as the underground injection project is approved for injection, and shall be provided to the Division upon request.

(l) Additional requirements or modifications of the above requirements may be necessary to fit specific circumstances and types of projects. Examples of such additional requirements or modifications are:

(1) Injectivity tests.

(2) Graphs of time vs. oil, water, and gas production rates, maintained for each pool in the project and available for periodic inspection by Division personnel.

(3) Graphs of time vs. tubing pressure, casing pressure, and injection rate maintained for each injection well and available for periodic inspection by Division personnel.

(4) List of all observation wells used to monitor the project, indicating what parameters each well is monitoring (i.e., pressure, temperature, etc.), submitted to the Division annually.

(5) Isobaric maps of the injection zone, submitted to the Division annually.

(6) Notification of any change in waste disposal methods.

(7) Periodic land-surface elevation change measurements.

Note: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1724.10.1. Mechanical Integrity Testing Part One – Casing Integrity

(a) **Casing Pressure Test at the Maximum Allowable Surface Pressure**. Prior to commencing injection operations for the first time after a well is approved or reapproved by the Division for injection, each injection well shall pass a pressure test of the casing to determine the absence of leaks. Thereafter, the casing of each well shall be tested at least once every five years, prior to recommencing injection operations following the repositioning or replacement of downhole equipment, or whenever requested by the Division. If an injection well is a gas

disposal well, then the casing of the well shall be tested at least once every year. If a required pressure test is not successfully completed, then the operator shall immediately notify the Division and the well shall not be used for injection without subsequent written approval from the Division.

(b) Pressure testing under this section shall conform to the following:

(1) If injection in the well is through tubing and packer, then the pressure test shall be of the casing-tubing annulus of the well.

(2) Pressure testing shall be conducted with a liquid unless the Division approves pressure testing with gas.

(3) If pressure testing will be conducted with a liquid that contains additive other than brine, corrosion inhibitors, or biocides, then the operator shall consult with the Division regarding the contents of the liquid prior to commencing testing.

(4) The wellbore shall be filled with a stable column of fluid that is free of excess gases.

(5) Pressure tests shall be recorded and a calibrated gauge shall be used that can record a pressure with an accuracy within one percent of the testing pressure. Pressure shall be recorded at least once per minute during testing. If an analog gauge is used, then the test pressure shall be within the mid-range scale of the gauge. The pressure test results shall be submitted to the Division in a digital tabular format within 60 days of the date the test is conducted. The charts or digital recording of the pressures during testing shall be provided to the Division upon request.

(6) The operator may select the initial test pressure of the pressure test, provided that the pressure test is conducted at an initial test pressure of at least 200 psi above surface pressure, and the maximum allowable surface injection pressure for the injection well, as determined under Section 1724.10.3, shall not exceed the initial test pressure used during the most recent successful pressure test.

(7) Pressure tests shall test the casing of the well from the surface to a depth that is within 100 feet measured depth above the uppermost perforation, immediately above the casing shoe of the deepest cemented casing, or immediately above the top of the landed liner, whichever is highest. If the top of the landed liner is 100 feet or more above the cemented casing shoe, then the pressure test shall be to a depth specified by the Division on a case-by-case basis.

(8) A pressure test is successful if the pressure gauge does not show more than a three percent change from the initial test pressure over a continuous 30-minute period, except that if the well is a cyclic steam injection well, then an increase in pressure of as much as 10 percent is a successful test.

(9) The Division may modify the testing parameters on a case-by-case basis if, in the Division's judgment, the modification is necessary to ensure an effective test of the integrity of the casing.

(c) **Alternative Pressure Monitoring.** Subject to the Division's approval, for injection wells equipped with tubing and packer, operators may propose a pressure testing and annular pressure monitoring program, consistent with this subdivision, as a substitute for the pressure test described in subdivision (a). If an injection well is covered by an approved pressure testing

and annular pressure monitoring program, then the maximum allowable surface pressure for the well is the calculated pressure value under Section 1724.10.3(a)(1).

(1) An operator's proposals for alternative annular pressure monitoring shall include the following information:

(A) All relevant information about the injection wells proposed to be monitored, including identifying information, size of the tubing and packer and setting depth, and date of the last tubing and packer reset;

(B) All relevant information about the proposed pressure monitoring system, including monitoring instrumentation specifications, computer data acquisition and storage system specifications, method and frequency of calibrating and otherwise confirming the working order of the monitoring system, data retention, and reporting protocols with a clear identification of reportable statistical deviations;

(C) Schedule of injection project implementation, including the known and anticipated addition or removal of wells from the project; and

(D) Technical justifications and reasons for requesting the alternative proposal.

(2) Alternative pressure testing and annular pressure monitoring programs are subject to the Division's approval, and the requirements and limitations stated in subdivisions (A) through (F), below.

(A) The well shall be pressure tested in accordance with all of the requirements in subdivision (a), except that pressure tests shall be conducted at an initial pressure of at least 500 psi, and subdivision (a)(6) shall not apply.

(B) In order to demonstrate ongoing mechanical integrity, the alternative annular pressure monitoring program shall adhere to the following conditions:

(i) The casing-tubing annulus shall have a minimum of 100 psi pressure at all times, preferably with a nitrogen gas blanket at the surface to stabilize potentially large variations in pressure due to thermal expansion of incompressible fluid;

(ii) There shall be an observable pressure differential (+/- 10 percent of the tubing pressure or at least +/- 50 psi) between the annular pressure and the tubing pressure; and

(iii) There shall be no anomalous variances in the annular pressure. If there are significant pressure variations from the historic daily pressure readings, these shall be satisfactorily explained and documented as part of the operator's record of mechanical integrity.

(C) The Division may consider proposals to modify the conditions of subdivision (c)(2)(B) on a case-by-case basis if the Division determines that the proposal will represent a stronger demonstration of ongoing mechanical integrity. Such proposals may include, but are not limited to, fail-safe systems, such as automatic casing pressure relief systems, and other back-up safety, shutdown, and pressure relief systems.

(D) The casing-tubing annular pressure shall be measured and recorded at least as frequently as every five minutes with a pressure gauge having an appropriate range. The record of such documentation shall be made available to the Division upon request, including in digital form within one business day of a request from the Division. A Division-approved, operating supervisory control and data acquisition (SCADA) system, with automatic computer alarm notification, may be used to satisfy this requirement and is a preferred methodology.

(E) The operator shall take immediate action to investigate any anomalous pressure incidents, as compared to historic daily readings. If there is any reason to suspect a leak, the operator shall take immediate action to prevent damage to public health, safety, and the environment. The operator shall provide immediate notice to the Division of any anomalous pressure incidents and the steps taken in response.

(F) At any time, the Division may request a full casing pressure test as described in subdivision (a).

(d) **Alternate Testing Methods.** An alternate mechanical integrity testing method may be used to satisfy the requirement under this section to pressure test the casing of an injection well if the alternate testing method has been approved by the Division on a case-by-case basis as being at least as effective as pressure testing to demonstrate the integrity of the well at the calculated pressure value under Section 1724.10.3(a)(1). Examples of alternate testing methods that would be considered on a case-by-case basis are a casing wall thickness inspection to estimate internal and external corrosion, employing such methods as magnetic flux or ultrasonic technologies; or a combination of an ultrasonic imaging tool and a cement evaluation log. If the most recent successful test of an injection well under this section was by testing approved under this subdivision, then the maximum allowable surface pressure for the well is the calculated pressure value under Section 1724.10.3(a)(1).

(e) For injection wells that as of April 1, 2019, were approved for injection but were not previously subject to periodic casing pressure testing requirements, testing under this section is not required to be completed until April 1, 2024, unless the injection well is a gas disposal well, in which case testing shall be completed by April 1, 2020. For all other injection wells, if testing consistent with the requirements of this section has not been done on the well in the past five years, or in the past year if it is a gas disposal well, then the well shall not be used for injection without subsequent written approval from the Division.

Note: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1724.10.2. Mechanical Integrity Testing Part Two – Fluid Migration Behind Casing, Tubing, or Packer

(a) In addition to testing under Section 1724.10.1, operators shall periodically test injection wells to demonstrate that there is no fluid migration behind the casing, tubing, or packer. This testing may be accomplished by any of the methods set forth in subdivisions (d) through (f), or other method approved by the Division (including modifications of the methods below when approved by the Division in writing). Operators shall obtain written approval from the Division regarding the testing method prior to performing the tests.

(b) Testing under this section is required within three months after injection has commenced for the first time after a well is approved or reapproved by the Division for injection. Commencing April 1, 2019, subsequent testing under this section is required at least once every two years, with the following exceptions:

(1) Disposal injection wells shall be tested at least once a year;

(2) Low-use cyclic steam injection wells are required to be tested at least once every five years;

(3) If a well that previously met the definition of a low-use cyclic steam injection well has not been tested in over one year, then testing is required within one year of the time that the well stopped being a low-use cyclic steam injection well.

(4) Steamflood injection wells equipped with tubing and packer are required to be tested at least once every five years;

(5) Testing is required following an unplanned variance in injection pressure of more than 25 percent within a 48-hour period, unless the operator demonstrates to the Division that the variance was the result of an issue that does not relate to well integrity; and

(6) Testing is required when requested by the Division, including as may be specified in the Project Approval Letter.

(c) On a project or well-specific basis, the Division may approve different testing frequencies from those specified in subdivision (b), and may approve alternative methods for demonstrating an absence of fluid migration behind the casing, tubing, or packer. Any approved variance shall be documented in writing and be based on specific factors identified in the writing, including but not limited to well construction, age of the well, demonstrated quality of cement encasing the well, quality of groundwater in the area, and operational considerations.

(d) **Radioactive Tracer Survey.** In addition to all other applicable federal, state, and local requirements, a radioactive tracer survey performed to satisfy the requirements of this section shall adhere to the following:

(1) Testing shall be conducted while injecting, and the operator shall ensure that adequate fluid can be supplied for the test. The injection rate shall be governed by the ability of the operator to track the radioactive tracer as it moves downward, but the injection rate should be stable and as close to the normal operating injection rate as practical.

(2) If the injection well is equipped with a packer and there is no injection occurring through the casing-tubing annulus, the casing-tubing annulus valve shall be open during testing and there shall be no fluid flow, unless the well is a gas disposal well. If fluid flow is indicated, the test shall be discontinued and the casing-tubing annulus shall be evaluated.

(3) Gamma ray detector sensitivity shall be set in consideration of lithologic and other effects.

(4) Before conducting the test, a dynamic temperature survey shall be run from at least 200 feet above the packer to the total depth, and a static temperature survey shall be run for the entire length of the well. A casing collar locator shall be run from 200 feet above the packer to the total depth. If the well is not equipped with tubing and packer, then the casing collar locator shall be from 200 feet above the top perforation to the total depth.

(5) A background gamma ray log over the interval to be tested shall be recorded before any radioactive material is introduced into the well.

(6) Radioactive tracer tubing rate checks shall be run within 200 feet of the top and 200 feet from the bottom of the tubing.

(7) The release of a slug of radioactive material shall be above the interval to be tested.

(8) The slug of radioactive material shall be followed with the logging tool or the tool shall make repeated passes upward through the slug as it moves down the well. Alternatively, with Division approval, the amount for the slug to go from surface to the tool may be measured. All logging shall be done at a single logging speed which is appropriate for the injection rate to allow quantitative measurements of deflections to be evaluated.

(9) If repeated passes are used, the logs resulting from the slug-tracking exercise should overlap so that the return of radioactivity to the level which existed before the slug's passing is demonstrated for the entire length of the section of the well being tested. The logs of all passes shall be presented as a composite log on a common depth track. If means to differentiate the log traces are available, then no other presentation is required. If the traces cannot be differentiated on the composite log, then they shall also be presented individually.

(10) After any ejection of radioactive tracer into the wellbore, the slug of radioactive tracer material shall be followed until it has moved below the interval being tested. Any portion of the slug of radioactive tracer material that divides shall be accounted for.

(11) After completion of the log passes, a final log should be made through the entire tested interval to check for residual radioactivity which might be associated with exit of radioactive tracer material from the wellbore.

(12) If a well other than a steam injection well is injecting at a rate consistent with that described in subdivision (d)(1), radioactively treated beads shall be introduced into the well and evaluated according to subdivision (d)(7) through (d)(10).

(13) Steam injection wells shall be tested using an inert gas tracer.

(e) **Temperature Survey.** A temperature survey performed to satisfy the requirements of this section shall adhere to the following:

(1) The well shall be taken off injection at least 24 hours but not more than 48 hours prior to performing the temperature survey, unless an alternate duration has been approved by the Division.

(2) The temperature logging tool shall be calibrated to the manufacturer’s recommendations or as otherwise requested by the Division.

(3) The well shall be logged from the surface downward, lowering the tool at a rate of no more than 30 feet per minute or a faster rate approved in advance by the Division based upon the operator’s demonstration that the faster rate will yield data of at least equivalent quality.

(4) If the well has not been taken off injection for at least 24 hours before the log is run, comparison with either a second log run six hours after the time the log of record is started or a log from another well at the same site showing no anomalies shall be available to demonstrate normal patterns of temperature change.

(5) The log data shall be provided to the Division digitally in LAS, ASCII, or other format that is acceptable to the Division.

(f) **Noise Log.** For a noise log performed to satisfy the requirements of this section, logging shall include a repeat section of no less than 200 feet, preferably across intervals where anomalies are present.

(g) The operator shall take immediate action to investigate any anomalies encountered during testing required under this section. If there is any reason to suspect fluid migration, the

operator shall take immediate action to prevent damage to public health, safety, and the environment, and shall notify the Division immediately.
Note: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1724.10.3. Maximum Allowable Surface Injection Pressure

(a) Injection pressure at surface shall not exceed the maximum allowable surface injection pressure for an injection well, as approved by the Division under this section and documented in the supporting project data under Section 1724.7(a)(4). Except as provided under subdivision (b), the maximum allowable surface injection pressure for an injection well shall be the lower of following two values:

(1) A calculated pressure value equal to the true vertical depth of the shallowest portion of the well open to the injection zone multiplied by the difference between the injection gradient and the injection fluid gradient (MASIP = (IG – IFG) * TVD). The injection gradient used for this calculation shall be the product of the fracture gradient as determined under subdivision (b) or (c), multiplied by 0.95, or other multiplier subject to Division approval on a well-specific basis that more appropriately accounts for factors such as a conservative allowance for friction loss. If the Division allows friction loss to be factored into the calculation, then the friction factor shall be calculated based on the new coated tubing of the largest diameter that will be used for injection. If a single well is injecting through dual injection strings, then the friction factor of the two strings shall be calculated separately.

(2) The initial test pressure used during the most recent successful pressure test of the injection well under Section 1724.10.1(b). If the pressure testing requirement for the injection well was satisfied under Section 1724.10.1(c) or (d), then the maximum allowable surface injection pressure shall be the calculated pressure value as determined under subdivision (a)(1).

(b) The Division may approve a maximum allowable surface injection pressure higher than what would be allowed under subdivision (a) based on a demonstration by the operator of all of the following:

(1) The higher maximum allowable surface injection pressure is needed for effective resource production;

(2) Injected fluid will remain confined to the approved injection zone;

(3) The higher pressure will not initiate fractures outside the approved injection zone or propagate existing fractures outside the approved injection zone; and

(4) The higher pressure will not otherwise threaten life, health, property, or natural resources.

(c) Subject to the Division's approval, an estimated baseline fracture gradient may be used for determining the maximum allowable surface injection pressure for all injection wells within a given area. An estimated baseline fracture gradient shall be supported by representative step-rate tests, or other testing or geologic data, demonstrating to the Division's satisfaction that the estimated baseline fracture gradient is lower than the actual fracture gradient that would be encountered anywhere in the injection zone where the estimated baseline fracture gradient will be used.

(d) If an injection well is not within the area of an approved estimated baseline fracture gradient, or if the operator seeks to establish a well-specific fracture gradient above the estimated baseline fracture gradient, then the fracture gradient shall be determined by performing a step-rate test on the injection well or by another method approved by the Division to effectively determine the fracture gradient.

(e) Step-rate tests conducted to satisfy the requirements of this section shall meet the following requirements:

(1) Before commencing the test, the well shall be shut in until the bottom-hole pressures approximate shut-in formation pressures. If the shut-in well flows to the surface, then the static surface pressure shall be read and recorded.

(2) The operator may determine the appropriate length of time to conduct each step of the step-rate test, provided that each of the steps is conducted for the same amount of time and a stabilized pressure value is obtained within each step. If steps are conducted for differing lengths of time, if a step does not yield a stabilized pressure value, or if formation breakover is not clearly demonstrated, then the Division may deem the step-rate test inconclusive. Suggested step durations are 30 minutes if the formation has a permeability of more than 10 millidarcies, and sixty minutes if the formation has a permeability of ten millidarcies or less.

(3) The first three steps of the step-rate test shall be below the fracture gradient. Suggested step pressures are 5, 10, 20, 40, 60, 80, and then 100 percent of the proposed injection rate, or until formation breakdown.

(4) Real-time downhole and surface pressure recording using digital pressure gauges shall be employed, unless an alternative has been approved by the Division.

(5) Bottom-hole pressure shall be recorded at a zero injection rate for at least one full time step before the first step of the step-rate test and for one full time step after the last step of the step-rate test.

(6) Step-rate test data reported under Section 1724.7(a)(4) shall include the injection rate, bottom-hole pressure, surface pressure, pump rate, volume, and time recorded continuously at a rate of at least one pressure recording per second during the step-rate test. The step-rate test data submitted to the Division shall be unaltered and submitted in a digital format.

(7) Operators shall provide the appropriate Division district office with at least 24 hours of advance notice, or other period of advance notice acceptable to the district office, prior to conducting a step-rate test for purposes of this section.

Note: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1724.10.4. Continuous Pressure Monitoring

(a) Operators shall comply with the following requirements for well-specific injection pressure monitoring:

(1) Well-specific injection pressure shall be continuously recorded at all times that a well is approved for injection by the Division, regardless of whether injection is actually occurring. An operator may satisfy this requirement by recording injection pressure from a header or

manifold if approved by the Division based on a showing that the operator is able to calculate well-specific injection pressures from the recorded data. An operator may suspend continuous injection pressure recording for a well while the well is disconnected from all injection lines.

(2) Injection pressure records shall be maintained by the operator as long as the well is approved for injection by the Division, and for three years after that, and shall be provided to the Division upon request.

(3) On or before the last day of each month, operators shall report to the Division the highest instantaneous injection pressure for each injection well in the last preceding calendar month.

(4) Digital or analog pressure recording devices may be used to meet the requirements of this subdivision. A Division-approved supervisory control and data acquisition (SCADA) or equivalent continuous real-time recording system, with automatic computer alarm notification, is not required but may be used to meet the requirements of this subdivision. Pressure recording devices shall be maintained in good working order and be calibrated as recommended by the manufacturer. Evidence of such calibration shall be available to the Division upon request.

(5) The Division may waive the requirements of this section for an injection well if the operator demonstrates that the injection facilities are configured in a manner that effectively prevents injection into the injection well above the maximum allowable surface injection pressure.

(b) Operators are not required to comply with subdivision (a) until April 1, 2021. Until an operator has complied with subdivision (a), the operator shall ensure that an accurate, operating pressure gauge or pressure recording device shall be available at all times, and all injection wells shall be equipped for installation and operation of such gauge or device. Gauges shall be regularly calibrated in accordance the with manufacturer's recommendations. Evidence of such calibration shall be available to the Division upon request.

Note: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1724.11. Surface Expression Prevention and Response

(a) Underground injection projects shall not result in any surface expression.

(b) The following requirements apply to all underground injection projects that the Division determines have been known to cause a surface expression, and to all underground injection projects that involve the application of steam to a diatomaceous formation unless it has been demonstrated to the Division's satisfaction on a project-specific basis that surface expressions are not a concern for that project:

(1) The operator shall develop a surface expression monitoring and prevention plan for review and approval by the Division. At a minimum, the plan shall include the following:

(A) A subsurface injection-production mass balancing surveillance system utilizing a continuous tilt meter array or other ground monitoring system approved by the Division; or implementation of a real-time pressure/flow monitoring system that will give adequate warning to prevent surface expressions.

(B) A map of the project area with all surface expressions, including cracks, fissures, and sink holes related to underground injection, and containment measures prominently marked. A current map of these features shall be provided to the Division and shall be updated as these features are discovered, installed, or changed.

(C) Protocols for restriction of access to areas where there are surface expressions or surface expression containment measures.

(D) Training, including safety measures and identification of possible hazards, for field personnel working in areas where there are surface expressions or where surface expressions may occur.

(E) If the Division's determination that an underground injection project is subject to the requirements of this subdivision does not occur until after the Division's approval of the underground injection project, then the operator shall submit this plan to the Division within six months of the Division's determination.

(2) The operator shall have staff on site 24 hours a day to monitor underground injection project operations.

(3) The operator shall conduct daily visual inspections of all wells and production facilities associated with the underground injection project.

(4) The operator shall continuously monitor steam injection rates for active injection wells, and shall monitor injection pressures in accordance with Section 1724.10.4. If, over any 48-hour period, injection pressures show an unplanned variance of more than 25 percent or the injection rate shows an unplanned variance of more than 30 percent, the operator shall immediately notify the Division and initiate a diagnosis within 12 hours, including but not limited to:

(A) Confirmation of data.

(B) Inspection of wells and facilities associated with the anomaly.

(C) Review of overall system operations.

(D) Evaluation of ground monitoring data.

(5) If a diagnosis conducted pursuant to subdivision (b)(4) indicates there is a threat of steam leaving the approved injection zone, or if after 72 hours the diagnosis is inconclusive, then the operator shall immediately cease injection in wells with a wellhead that is within 300 feet of the wellhead of the well that experienced the variance. Injection may resume once the Division is satisfied that the threat has been resolved and the appropriate Division district deputy has provided the operator with written approval to restart injection.

(c) Operators shall immediately notify the Division if a surface expression occurs, increases in flow or size, or reactivates within the operator's lease. The notification to the Division shall include a list of all injection wells with a wellhead that is 300 feet or less from any point of the surface expression, ground monitoring data for no less than 14 days immediately preceding the occurrence, and additional data as may be requested by the Division.

(d) The operator shall immediately cease injection in a well if there is a surface expression within 150 feet of its wellhead. If the surface expression continues to flow for more than 24 hours, then the operator shall immediately cease injection in a well if the surface expression is within 300 feet of its wellhead. If the surface expression continues to flow for more than five

days, then the operator shall immediately cease injection in a well if the surface expression is within 600 feet of its wellhead. If a surface expression continues to flow for more than 10 days, then the Division will determine an expanded radius around the surface expression within which injection shall cease. The Division will determine the expanded radius based on consideration of the flow rate of the surface expression, geologic factors, and operational parameters.

(e) The Division may direct injection to cease at any injection well, regardless of its distance from a surface expression, if the Division finds reason to believe that the injection well is causing or contributing to a surface expression.

(f) All wells that have ceased injecting pursuant to subdivisions (d) or (e) shall be prominently marked and tagged in the field to indicate that injection is not occurring.

(g) Wells that have ceased injecting pursuant to subdivisions (d) or (e) may not resume injection until the Division is satisfied that the cause of the surface expression has been determined and remediated and the appropriate Division district deputy has provided the operator with written approval to restart injection. With the advance written approval of the Division, the operator may be allowed to conduct limited injection for purposes of identifying the cause of a surface expression.

(h) If a surface expression discharges oil in a reportable quantity, then it shall be immediately reported as an oil spill to the Division and the California Governor's Office of Emergency Services at (800) 852-7550.

(i) Until there has been a determination by a professional engineer licensed under Chapter 7 of Division 3 of the California Business and Professions Code that the surface expression has stopped flowing and the area is safe for reentry, the area where a surface expression has occurred shall be cordoned off to restrict access to the surface expression. Additionally, the operator shall place prominent "Danger" or "Warning" signs, compliant with section 3340 of Title 8 of the California Code of Regulations, near (as safety dictates) the surface expression.

(j) As long as the Division concurs that a surface expression is a low-energy seep, the surface expression is not subject to the prohibition of subdivision (a) or the response requirements of subdivisions (d) through (g).

(k) The volume of any oil removed from the site of the surface expression shall be measured and reported to the Division, consistent with Public Resources Code section 3227, using a unique identifier assigned by the Division.

Note: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1724.12. Surface Expression Containment

(a) The following requirements apply to the installation and use of surface expression containment measures, if any:

(1) The operator shall provide the Division with notice of construction of a surface expression containment measure to allow the Division to observe and document the installation.

(2) Surface expression containment measures shall be designed and signed off by, and construction supervised and approved by, a professional engineer licensed under Chapter 7 of Division 3 of the California Business and Professions Code. All surface expression containment

measures shall be included in the operator's Spill Contingency Plan required under Section 1722.9, shall meet all federal, state, and local requirements, and shall ensure that surface expressions do not threaten surface water or USDWs.

(3) Upon completion of a surface expression containment measure, the licensed engineer shall provide a signed written report to the Division indicating whether the surface expression containment measure was constructed as designed and will safely and effectively contain and collect the flow from the surface expression.

(4) The operator shall monitor and record the rate of flow of the surface expression and monitor the containment measures at least daily, unless the Division has approved less frequent monitoring. The operator shall maintain records of the monitoring of the surface expression and containment measures for as long as the surface expression persists and provide them to the Division upon request. The operator shall immediately notify the Division if the surface expression increases in flow or size, reactivates, or moves, or if there is any indication that the effectiveness of the surface expression containment measure has diminished.

(5) The operator shall map and prominently mark in the field all surface expression containment measures, and shall restrict access to such containment measures.

(b) Notwithstanding any efforts undertaken by the operator to contain a surface expression or otherwise mitigate risks associated with a surface expression, the existence of a surface expression, other than a low-energy seep, is a violation of the prohibition in Section 1724.11(a) against underground injection projects resulting in any surface expression.

Note: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1724.13. Universal Operating Restrictions and Incident Response

(a) The operator shall cease injection into the affected injection well and immediately notify the Division if any of the following occur:

(1) The operator has not performed mechanical integrity testing on the well as required by Section 1724.10(i) or the notification and results required under Section 1724.10(i) have not been provided to the Division;

(2) The well failed a mechanical integrity test required by Section 1724.10(i) or there is any other indication that the well lacks mechanical integrity or is otherwise incapable of performing as approved by the Division;

(3) There is any indication of a failure, breach, or hole in the well tubing, packer, cement, or well casing, including failures above a packer;

(4) There is visible surface damage or erosion of the well location caused by injection;

(5) There is any indication that fluids being injected into the well are not confined to the approved injection zone;

(6) There is any indication that damage to life, health, property, or natural resources, or loss of hydrocarbons is occurring by reason of the injection;

(7) The operator has not provided information regarding the well as required under Public Resources Code section 3227;

(8) The well has become an idle well as defined by Public Resources Code section 3008, subdivision (d), unless the operator has requested and the Division has granted an allowance for the well to remain approved for injection for a longer period while the well is idle; or

(9) The Division instructs the operator in writing to suspend injection.

(b) The operator shall comply with all operational and remedial directives of the Division related to the reason for ceasing injection, and shall not resume injection into the well without subsequent written approval from the Division.

(c) Each day that injection occurs into an injection well in violation of this section shall be considered a separate violation. As required under Section 1777(c)(4), the operator shall disconnect injection lines from the injection well if there is no current approval from the Division for injection into the well.

Note: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3106 and 3236.5, Public Resources Code.

Article 5. Requirements for Underground Gas Storage Projects

§ 1726. Purpose, Scope, and Applicability.

The purpose of this article is to set forth regulations governing underground gas storage projects and gas storage wells. This article applies to underground gas storage projects and gas storage wells in existence prior to the effective date of this article, as well as new underground gas storage projects and gas storage wells. Underground gas storage projects and gas storage wells are not subject to the requirements of Sections 1724.6 through 1724.10.

Authority: Sections 3013, 3106 and 3180, Public Resources Code. Reference: Sections 3106, 3180, 3181, 3220 and 3403.5, Public Resources Code.

§ 1726.1. Definitions.

(a) The following definitions are applicable to this article:

(1) “Area of review” means the three-dimensional extent of the reservoir used for underground gas storage and surrounding areas that may be subject to its influence. The area of review is delineated by the geologic extent of the reservoir such as confining strata, structural closure, decrease or loss of porosity and permeability, or hydrodynamic forces in a three dimensional image.

(2) “Confining strata” means the rock layer or layers at the boundaries of the storage reservoir acting as the primary barriers preventing migration of fluids.

(3) “Fluid” means liquid or gas.

(4) “Gas storage well” means an active or idle well used primarily to inject or withdraw gas from an underground gas storage project.

(5) “Reservoir” means the portion of the geologic stratum that is being used to store natural gas in an underground gas storage project. The entire depth interval of a reservoir from the shallowest to the deepest depth can be subdivided into one or more depth intervals, which are referred to in this article as “zones”.

(6) “Underground gas storage project” means a project for the injection and withdrawal of natural gas into an underground reservoir for the purpose of storage. An underground gas storage project includes the reservoir used for storage, the confining strata, gas storage wells, observation wells, and any other wells approved for use in the project. An underground gas storage project also includes the wellheads and, to the extent that they are subject to regulation by the Division, attendant facilities, and other appurtenances.
Authority: Sections 3013, 3106 and 3180, Public Resources Code. Reference: Sections 3106, 3180, 3220 and 3403.5, Public Resources Code.

§ 1726.2. Approval of Underground Gas Storage Projects.

(a) A Project Approval Letter shall be obtained from the Division before any injection or withdrawal occurs as part of an underground gas storage project. The Project Approval Letter shall specify the location and nature of the underground gas storage project, as well as the conditions of the Division’s approval. Changes to the operational parameters of an underground gas storage project as set forth in the Project Approval Letter are subject to approval by the Division and shall be noted in either an addendum to the Project Approval Letter or a revised Project Approval Letter. Underground gas storage project operations shall not occur or continue unless consistent with the terms and conditions of a current Project Approval Letter.

(b) The Division will review underground gas storage projects periodically, but not less than once every three years, to verify adherence to the terms and conditions of the Project Approval Letter, and will periodically review the terms and conditions of the Project Approval Letter to ensure that they effectively prevent damage to life, health, property, the environment, and natural resources. Project Approval Letters are subject to suspension, modification, or rescission by the Division.

(c) If the Division determines that operation of an underground gas storage project is inconsistent with the terms and conditions of a current Project Approval Letter, or otherwise poses a threat to life, health, property, the environment, or natural resources, then upon written notice from the Division specified operations shall cease immediately, or as soon as it is safe to do so.
Authority: Sections 3013, 3106 and 3180, Public Resources Code. Reference: Sections 3106, 3180, 3220 and 3403.5, Public Resources Code.

§ 1726.3. Risk Management Plans.

(a) For each underground gas storage project, the operator shall submit a project-specific Risk Management Plan to the Division for review and approval. For underground gas storage projects in existence at the time that this section goes into effect, the operator shall submit a Risk Management Plan in accordance with the requirements of this section within six months of the effective date of this section. If the Division identifies any deficiencies in the Risk Management Plan, then the Division will consult with the operator and identify an appropriate timeframe for correcting the deficiency. The Risk Management Plan shall specify a schedule for the operator to review and submit updates to the risk assessment and prevention and mitigation

protocols to the Division. The Division will review the Risk Management Plan periodically, but not less than once every three years.

(b) The Risk Management Plan shall demonstrate that stored gas will be confined to the approved reservoir and that risks of damage to life, health, property, the environment, or natural resources are identified and prevented or effectively mitigated. In accordance with subdivision (c), the Risk Management Plan shall evaluate threats and hazards associated with operation of the underground gas storage project and identify prevention and mitigation protocols that effectively address those threats and hazards. The Division may, in its discretion, require additional data, additional risk assessment, or modification of prevention and mitigation protocols. Risk assessment and prevention and mitigation protocols in the Risk Management Plan shall be consistent with and in addition to any other existing requirements.

(c) The Risk Management Plan shall include a description of the methodology employed to conduct the risk assessment and identify prevention and mitigation protocols, with references to any third-party guidance followed in developing the methodology. The methodology shall include at least the following:

(1) Identification of potential threats and hazards associated with operation of the underground gas storage project, including identification of the most important potential accident scenarios associated with operation of the underground gas storage project;

(2) Quantitative risk assessment of the probability of threats and hazards and their consequences, using an appropriate methodology identified by the operator that includes:

(A) Evaluation of the frequency and range of consequences, including estimates of the uncertainties in the numerical values;

(B) Identification of the principal equipment failures, external initiating events, and operational errors associated with threats and hazards, and quantification of the impact of these occurrences on the probability of and consequences of the threats and hazards; and

(C) Identification of the engineered or natural features that most affect the extent of the consequences of threats and hazards, and a quantification of their relative roles, including an estimate of the uncertainties in the quantification;

(3) Identification of possible prevention and mitigation protocols to reduce, manage, or monitor risks, including evaluation of the efficacy and cost-effectiveness of the prevention protocols;

(4) Risk assessment on a well-by-well basis, to the extent that risks identified are specific to wells;

(5) Prioritization of risk prevention and mitigation efforts based on potential severity and estimated likelihood of occurrence of each threat;

(6) Selection and implementation of prevention and mitigation protocols;

(7) Documentation of the risk assessment process, including description of the basis for selection of prevention and mitigation protocols;

(8) Data feedback and validation throughout the risk assessment process; and

(9) Regular, periodic risk assessment reviews to update information and evaluate the effectiveness of prevention and mitigation protocols employed, which shall occur not less than once every three years and in response to changed conditions or new information.

(d) In addition to the contents required in subdivision (b), all Risk Management Plans shall include at least the following risk assessment and prevention and mitigation protocols:

(1) Well construction and design standards, consistent with the requirements of Section 1726.5 and including specification of the life expectancy of individual mechanical well barrier elements. If the operator has wells that do not conform with the requirements of Section 1726.5, then the Risk Management Plan shall include a work plan and schedule for either bringing the nonconforming wells into compliance or plugging and abandoning the wells in accordance with Public Resources Code section 3208. The work plan and schedule shall provide for full compliance with Section 1726.5 within seven years, with at least 10 percent of the nonconforming wells addressed in the first year and the total percentage of the nonconforming wells addressed increasing by 15 percent in each subsequent year. The work plan shall include prevention and mitigation protocols for monitoring and testing each well that is not yet in compliance with the requirements of Section 1726.5 so as to mitigate risks associated with the well to the extent feasible.

(2) For each gas storage well, evaluation of whether employment of surface and/or subsurface automatic or remote-actuated safety valves is appropriate based on consideration of at least the following:

(A) The well's distance from dwellings, other buildings intended for human occupancy, or other well-defined outside areas where people may assemble such as campgrounds, recreational areas, or playgrounds;

(B) Gas composition, operational pressures, total fluid flow, and maximum flow potential;

(C) The distance between wellheads or between a wellhead and other facilities, and access availability for drilling and service rigs and emergency services;

(D) The risks created by installation and servicing requirements of safety valves;

(E) The risks to and from the well related to roadways, rights of way, railways, airports, and industrial facilities;

(F) Proximity to environmentally or culturally sensitive areas;

(G) Alternative protection measures which could be afforded by barricades or distance or other measures;

(H) Age of well;

(I) The risks of sabotage;

(J) The current and predicted development of the surrounding area as reflected in the local general plan, topography and regional drainage systems**,** and environmental considerations;

(K) Topography and local wind patterns; and

(L) Evaluation of geologic hazards such as seismicity, landslides, subsidence, and potential for tsunamis.

(3) A schedule for verification and demonstration of the mechanical integrity of each well used in the underground gas storage project and each well that intersects the reservoir used for gas storage. The mechanical integrity testing protocols for gas storage wells shall, at a minimum, adhere to the requirements of Section 1726.6.

(4) Corrosion monitoring, evaluation, and mitigation including consideration of at least the following:

(A) Evaluation of tubular integrity and identification of defects caused by corrosion or other chemical or mechanical damage;

(B) Corrosion potential of wellbore produced fluids and solids, including the impact of operating pressures, temperatures, and compositions on the corrosion potential of wellbore fluids and analysis of partial pressures;

(C) Corrosion potential of annular and packer fluid;

(D) Corrosion potential of current flows associated with cathodic protection systems;

(E) Corrosion potential of all formation fluids, including fluids in formations above the storage zone; and

(F) Corrosion potential of uncemented casing.

(5) Ongoing monitoring of casing pressure changes at the wellheads of gas storage wells, analysis of facility flow erosion, individual facility component capacity and fluid disposal capability at intended gas and liquid flow rates and pressures, and analysis of the specific impacts that the intended operating pressure and temperature ranges could have on the corrosive potential of fluids in the system.

(6) Monitoring protocols in accordance with the requirements of Section 1726.7.

(7) Ongoing verification and demonstration of the integrity of the reservoir including demonstration that reservoir integrity will not be adversely impacted by operating conditions.

(8) Analysis and risk assessment of hazards associated with the formation of hydrates, and scale from the well stream under various pressure, temperature, and flow rates, including those beyond expected operating parameters.

(9) Analysis and risk assessment of natural and geologic hazards including, but not limited to, seismicity, faults, subsidence, inundation by tsunamis, sea level rise, and floods.

(10) Analysis and risk assessment of hazards associated with the potential for explosion or fire.

(11) If observation wells are employed, identification and documentation of baseline conditions such as wellbore pressure, pressure of monitored annuli, gas composition and liquid level.

(12) An assessment of human factors in operating and maintenance procedures. The human factors assessment shall consider staffing levels; the complexity of tasks; the length of time needed to complete tasks; the level of training, experience and expertise of employees; the human-machine and human-system interface; the physical challenges of the work environment in which the task is performed; employee fatigue and other effects of shiftwork and overtime; communication systems; and the understandability and clarity of operating and maintenance procedures. The human factors assessment shall also consider utilization of error-proof mechanisms, automatic alerts, and automatic system shutdowns.

(13) An effective training program with clearly stated goals. The training program shall specify the type and frequency of training and the risk assessments and prevention and mitigation protocols addressed.

(14) An equipment maintenance program that includes training and proactive inspection, repair, and replacement of equipment at risk of failure so as to ensure safe operation.

(15) An emergency response plan that at a minimum accounts for the threats and hazards identified in the Risk Management Plan and that complies with the requirements of Section 1726.3.1.

(16) Requests for notice from land use agencies of local land use decisions that could affect the Risk Management Plan, and providing notification to the Division of significant pending land use decisions.

(e) The operator shall adhere to the risk prevention and mitigation protocols detailed in its Risk Management Plan unless a variance has been approved by the Division in writing.

(f) The Division will provide completed Risk Management Plans and significant updates to the Risk Management Plans to the California Public Utilities Commission and post them on the Division's public internet website. If any part of a Risk Management Plan is subject to confidential treatment, then the Division will segregate the confidential records and only provide them if the California Public Utilities Commission has agreed to treat the records as confidential.
Authority: Sections 3013, 3106 and 3180, Public Resources Code. Reference: Sections 3106, 3180, 3181, 3220 and 3403.5, Public Resources Code.

§ 1726.3.1. Emergency Response Plan.

(a) The operator of an underground gas storage project shall have an emergency response plan approved by the Division and ready for immediate implementation. The emergency response plan shall specify a schedule for carrying out drills to validate the plan. The drills shall address the readiness of operator personnel with respect to their ability to interact with equipment and their ability to contact required third party service providers for the equipment. The emergency response plan shall identify and consider onsite personnel, outside emergency responders, and potentially affected communities. The operators shall provide local emergency response entities at least 30 days to review and provide input on the emergency response plan.

(b) The emergency response plan shall at a minimum address the following scenarios:

(1) Collisions involving well heads;
(2) Well fires and blowouts;
(3) Hazardous material spills;
(4) Equipment failures;
(5) Natural disasters/emergencies;
(6) Leaks and well failures;
(7) Medical emergencies; and
(8) Explosions.

(c) The emergency response plan shall at a minimum include all of the following:

(1) Clearly written and communicated emergency response plan policy, goals, and objectives;

(2) An incident management system designed to address resource management, communication systems, and incident documentation;

(3) Written action plans establishing assigned authority to the appropriate person(s) at a facility for initiating effective emergency response and control;

(4) Accident-response measures that outline response activities, leakage mitigation approaches, and well control processes for well failure and full blowout scenarios;

(5) Prepositioning, as feasible, and identification of materials and personnel necessary to respond to leaks, including materials and equipment to respond to and stop the leak itself as well as to protect public health and safety.

(6) A schedule for regular drills, providing for an opportunity for involvement of the Division and local emergency response entities, and providing an opportunity for drills initiated by local emergency response entities;

(7) An effective training program with clearly stated goals. The training program shall specify the type and frequency of training and the emergency scenarios addressed;

(8) Recordkeeping for all drills and training;

(9) A schedule for regular evaluation and update of the emergency response plan;

(10) Protocols for emergency reporting and response to appropriate government agencies;

(11) Specification of personnel roles and responsibilities;

(12) Internal and external communication protocol;

(13) Up-to-date emergency contact information including area codes; and

(14) A protocol for public notice of a large, uncontrollable leak to any potentially impacted community, as defined in the Risk Management Plan, if the leak cannot be controlled within 48 hours of discovery by the operator.

(d) The operator shall review and update the emergency response plan after key personnel changes, but no less often than once every three years. When reviewing and updating the emergency response plan, the operator shall again provide local emergency response entities at least 30 days to review and provide input on the emergency response plan.
Authority: Sections 3013, 3106 and 3180, Public Resources Code. Reference: Sections 3106, 3180, 3181, 3183, 3184 and 3403.5, Public Resources Code.

§ 1726.4. Underground Gas Storage Project Data Requirements.

(a) For all underground gas storage projects, the operator shall provide the Division with data, analysis, and interpretation that demonstrate that stored gas will be confined to the approved zone(s) of injection and that the underground gas storage project will not cause damage to life, health, property, the environment, or natural resources. The operator shall provide the data specified in this section and any data that, in the judgment of the Division on a case-by-case basis, are pertinent and necessary for the proper evaluation of the project. The operator shall ensure that required data is complete, current, and accurate, regardless of the

date of approval of the gas storage project. The data submitted to the Division shall include at least the following:

(1) Oil and gas reserves of all storage zones prior to start of injection, including calculations, to indicate the storage capacity of the reservoir being considered for gas storage.

(2) Description of existing surface and subsurface safety devices, tests, and precautions to be taken to ensure safety of the project.

(3) Produced water disposal method.

(4) Maximum and minimum reservoir pressure for the underground gas storage project and the data and calculations supporting the bases for the pressure limits. The pressure limits shall account for the following:

(A) The pressure required to inject fluids, particularly at total inventory, shall not exceed the design pressure limits of the wells, well heads, pipelines, or other associated facilities; or the fracture pressure of the reservoir or confining strata.

(B) The minimum reservoir pressure shall take into account the historic minimum operating pressure and reservoir geomechanical competency. The impacts of intended minimum reservoir pressure shall be accounted for as it relates to geomechanical stress and liquid influx.

(5) An engineering and geological study demonstrating that injected gas will not migrate out of the approved zone or zones, such as through another well, geologic structure, faults, fractures or fissures, or holes in casing. The study shall include, but is not limited to:

(A) Statement of primary purpose of the project.

(B) Reservoir characteristics of each storage zone, such as porosity, permeability, average thickness, areal extent, fracture gradient, original and present temperature and pressure, and original and residual oil, gas, and water saturations.

(C) A comprehensive geologic characterization of the gas storage project including lithology of the storage zone or zones and sealing mechanisms as well as all formations encountered from surface to the deepest well in the project. The geologic characterization shall include any information that may be required to ensure injected or withdrawn gas and other reservoir fluids do not have an adverse effect on the project or pose a threat to life, health, property, the environment, or natural resources. The geologic characterization shall include potential pathways for fluid migration and areas or formations where potential entrapment of migrated fluid could occur. Information to accompany the geologic characterization shall include, but is not limited to:

(i) Structure contour maps drawn on a geologic marker at or near the top of each gas storage zone in the project area, indicating faults and other lateral containment features.

(ii) Isopach map of each gas storage reservoir or subzone and the confining strata in the project area.

(iii) At least two geologic cross sections, one on strike and one on dip, through at least four gas storage wells in the project area and the areas immediately adjacent.

(iv) A representative geophysical log to a depth below the deepest gas storage zone identifying all geologic units, formations, groundwater that has 10,000 or less milligrams per liter of total dissolved solids content, groundwater that has 3,000 or less milligrams per liter of total dissolved solids content, oil or gas zones, and gas storage reservoirs.

(v) Additional information may be requested by the Division on a case-by-case basis, and may include, but is not limited to: additional isopach maps, three-dimensional modeling, oil-water, gas-water, or oil-gas contact maps of the project, or other information which would delineate known features such as faults and fractures within the area of review for the underground gas storage project.

(D) Reservoir fluid data for each gas storage zone, such as oil gravity and viscosity, water quality, presence and concentrations of non-hydrocarbon components in the associated gas (e.g. hydrogen sulfide, helium, etc.), and specific gravity of gas.

(E) A map of the area of review showing the location and status of all wells within and adjacent to the boundary of the area of review. The wellbore path of directionally drilled wells shall be shown, with indication of the interval penetrating the gas storage zone(s) of the underground gas storage project.

(F) All data specified in Section 1726.4.1, provided in the form of graphical casing diagrams or flat file data sets, for all wells that are within the area of review and that are in the same or a deeper zone as the gas storage reservoir, including directionally drilled wells that intersect the area of review in the same or deeper zone.

(G) Identification of all wells associated with oil and gas production that are within the area of review but that are not in the same or a deeper zone as the underground gas storage project, including description of the total depth of the well and the estimated top of the gas storage reservoir below the well.

(H) Wells completed in or penetrating through the intended gas storage reservoir shall be identified and evaluated for containment assurance for the design of gas storage operation volumes, pressures, and flow rates. The operator shall identify, and the Division confirm, wells which may require integrity testing or well logging in order to meet the integrity demonstration. The Division may select plugged and abandoned wells to be re-entered, examined, re-plugged and abandoned, or monitored to manage identified containment assurance issues prior to approval of gas storage operations.

(I) The planned or estimated well drilling and plugging and abandonment program to complete the project, showing all gas storage wells, plugged and abandoned wells, other wells related to the project, and the boundaries of the underground gas storage project.

(J) Maps of the locations of injection wells and zones, mining, and other subsurface industrial activities not associated with oil and gas production or gas storage operations within the area of review, to the extent it is publicly available.

(6) A gas storage injection and withdrawal plan that includes at least the following:

(A) Maximum anticipated surface injection pressure and maximum anticipated daily rate of injection, by well.

(B) Monitoring system or method to be utilized to ensure the gas injected is confined to the intended approved zone(s) of injection.

(C) A wellhead monitoring system for the detection of leaks.

(D) A list of cathodic protection measures where employed.

(E) Analysis of the gas injected, submitted to the Division on an annual basis.

(7) The name and API number of all gas storage wells and other wells that are part of the underground gas storage project.

(8) Any data that, in the judgment of the Division on a case-by-case basis, are pertinent and necessary for the proper evaluation of the underground gas storage project.

(b) Updated data shall be provided to the Division if there are changes in operating conditions, such as gas plant or compressor changes, or if more accurate data become available, such as updated cross sections, new reservoir characteristics data, or new pressure flow modeling.

(c) All data filed with the Division under this section shall be submitted electronically. All maps, diagrams**,** and exhibits shall be clearly labeled as to scale, north arrow, coordinate system, and purpose, and shall clearly identify wells, boundaries, zones, contacts, and other relevant data.

(d) Where it is infeasible to supply the data specified in subdivision (a), the Division may accept alternative data that demonstrate that injected gas will be confined to the approved reservoir or reservoirs of injection and that the underground gas storage project will not cause damage to life, health, property, the environment, or natural resources.

(e) The operator shall consult with the Division if the operator believes that there is a basis under state or federal law for confidential treatment of any data submitted to the Division. If the Division agrees that there is a basis for confidential treatment of data submitted, then the Division will take appropriate steps to maintain the confidentiality of that data.

(f) The Division will make all data received under this section available to the California Public Utilities Commission upon request. If the requested records are subject to confidential treatment, then the Division will only provide the records if the California Public Utilities Commission has agreed to treat the records as confidential.

(g) For underground gas storage projects in existence at the time that this section goes into effect, the operator shall submit revised and updated project data in accordance with the requirements of this section within 180 days of the effective date of this section.

Authority: Sections 3013, 3180 and 3106, Public Resources Code. Reference: Sections 3106, 3180, 3181, 3220 and 3403.5, Public Resources Code.

§ 1726.4.1. Casing Diagrams.

(a) Casing diagrams submitted under Section 1726.4, subdivision (a)(5)(F), shall adhere to the following requirements:

(1) Casing diagrams shall at a minimum include all of the following data:

(A) Operator, lease name, well number, and API number of the well;

(B) Date the well was spudded;

(C) Ground elevation from sea level;

(D) Reference elevation (i.e., rig floor or Kelly Bushing);

(E) Base of groundwater that has 3,000 or less milligrams per liter of total dissolved solids content;

(F) Base of groundwater that has 10,000 or less milligrams per liter of total dissolved solids content;

(G) Sizes, weights, grades, and connection types of casing and tubing;

(H) Details on associated equipment such as subsurface safety valves, packers, and gas lift mandrels;

(I) Depths of casing shoes, stubs, and liner tops;

(J) Depths of perforation intervals, water shutoff perforations, cement port, cavity shots, cuts, patches, casing damage, top of junk or fish left in well, and any feature that influences flow in the well or may compromise the mechanical integrity of the well;

(K) Hole size diameter and depth of drilled hole;

(L) Cement plugs inside casings, including top and bottom of cement plug and the date(s) the plug(s) was emplaced, with method of determination;

(M) All cement fill behind casings, including top and bottom of cemented interval, with method of determination;

(N) Type and density of fluid between cement plugs;

(O) Depths and names of the formation(s), zone(s), and geologic markers penetrated by the well, including the top and bottom of the gas storage zone(s) and the top and bottom of the confining strata;

(P) All information used to calculate the cement slurry (e.g., volume, density, yield) including, but not limited to, cement type and additives, for each cement job;

(Q) All of the information listed in this section for all previously drilled or sidetracked well bores; and

(R) Identification of wellhead and wellhead valve assembly equipment by model and pressure rating.

(2) Measured depth and true vertical depth shall be provided for all measurements required under subdivision (a)(1).

(3) For directionally drilled wells, a directional survey shall be provided with inclination, azimuth measurements, bottomhole location, and surface location.

(4) Casing diagrams shall be submitted in an electronic format.

(5) For all wells to be used for gas injection and/or withdrawal, the casing diagram shall include the mechanical well barrier elements that comprise the primary and secondary barriers as specified in Section 1726.5.

(6) When multiple boreholes are drilled in a well, all of the information listed in this section is required for both the original hole and for any subsequent redrilled or sidetracked well bores.

(b) In lieu of graphical casing diagrams, operators may satisfy the requirements of Section 1726.4, subdivision (a)(5)(F), by submitting a flat file data set containing all of the information described in this section.

Authority: Sections 3013, 3106 and 3180, Public Resources Code. Reference: Sections 3106, 3180, 3181, 3220 and 3403.5, Public Resources Code.

§ 1726.4.2. Evaluation of Wells Within the Area of Review.

(a) The following requirements apply, at minimum and subject to augmentation by the Division as the Division deems appropriate on a project-specific basis, to ensure that wells within the area of review will not be a potential conduit for fluid migration outside the approved gas storage zone:

(1) All wells within the area of review and that are in the same or a deeper zone as the gas storage reservoir, including directionally drilled wells that intersect the area of review in the same or deeper zone, shall be evaluated for the potential to allow fluid to migrate outside of the approved zone of gas storage. The operator should identify, and the Division confirm, wells which may require integrity testing or well logging in order to provide the requisite assurances that such wells will not act as conduits for fluid migration.

(2) Plugged and abandoned wells within the area of review shall have cement across all perforations and extending at least 100 feet above the highest of the top of a landed liner, the uppermost perforations, the casing cementing point, the water shutoff holes, or the approved gas storage zone. The Division may select plugged and abandoned wells to be re-entered, examined, re-plugged and abandoned, or monitored to manage identified containment assurance issues.

(3) If a plugged and abandoned well within the area of review does not meet the cement specifications of subdivision (a)(2), the Division may approve an alternative demonstration that the well will not be a potential conduit for fluid migration outside the approved gas storage zone. The Division's approval of such an alternative demonstration shall be supported by written findings by the Division that identify each plugged and abandoned well in the area of review that does not meet the cement specifications of subdivision (a)(2), specify how the well does not meet the requirements of subdivision (a)(2), and identify the basis for the Division's approval of the alternative demonstration.

Authority: Sections 3013, 3180 and 3106, Public Resources Code. Reference: Sections 3106, 3180, 3181, 3220 and 3403.5, Public Resources Code.

§ 1726.4.3. Records Management.

(a) The operator of an underground gas storage project shall establish a Records Management Program to ensure documentation of essential information is created, maintained, protected, and retrievable when needed. The operator shall submit its Records Management Plan to the Division.

(b) The Records Management Program shall identify all records related to evidence of conformity to the requirements in this article as essential, and these records shall be maintained for the lifetime of the project.

(c) The Records Management Program shall establish a filing and storage strategy that ensures records are accessible and protected against environmental damage. Records may exist in many different formats and shall be managed according to the format in which they are

maintained. Records may be protected following a graded approach, commensurate with the value of the record and the cost to reproduce the information.

(d) The Records Management Program shall establish a process for tracking records throughout their entire information life cycle so that it is clear at all times where a record exists, which is the most current version of the record, and the history of change or modification of the record.

(e) The Records Management Program shall allow for prompt retrieval and production of records upon request from the Division.

Authority: Sections 3013, 3106 and 3180, Public Resources Code. Reference: Sections 3106, 3181, 3220 and 3403.5, Public Resources Code.

§ 1726.5. Well Construction Requirements.

(a) Operators shall design, construct, modify, and maintain gas storage wells and every other well that penetrates the gas storage reservoir of the operator's underground gas storage project to effectively ensure mechanical integrity under anticipated operating conditions for the underground gas storage project. The operator shall ensure that a single point of failure does not pose an immediate threat of loss of control of fluids and make certain that integrity concerns with a gas storage well are identified and addressed before they can become a threat to life, health, property, the environment, or natural resources. This section does not apply to wells that have been plugged and abandoned in accordance with Public Resources Code section 3208.

(b) Operators can demonstrate that a gas storage well adheres to the performance standard in subdivision (a) by demonstrating all of the following:

(1) The well has been constructed with both primary and secondary mechanical well barriers to isolate the storage gas within the storage reservoir and transfer storage gas from the surface into and out of the storage reservoir.

(A) The primary mechanical barrier is the barrier that is exposed to the withdrawal or injection flow stream. The primary mechanical barrier shall be able to withstand full operating pressure as demonstrated by the pressure testing required under Section 1726.6, subdivision (a)(3), and through annular pressure monitoring as required under Section 1726.7, subdivision (a). An example of a well configuration that meets the minimum requirements for a primary mechanical barrier is a well configuration that includes:

(i) A wellhead master valve;
(ii) Tubing hanger with seals;
(iii) Production tubing; and
(iv) A production packer.

(B) The secondary mechanical barrier is not exposed to the withdrawal or injection flow stream under normal operations. The secondary mechanical barrier shall be able to withstand full operating pressure as demonstrated by the pressure testing required under Section 1726.6, subdivision (a)(3), and casing evaluation logs as required under Section 1726.6, subdivision (a)(2). In the event of a primary mechanical barrier failure, the secondary mechanical barrier shall be able to contain the leaking fluids until the primary mechanical barrier

is re-established. An example of a well configuration that meets the minimum requirements for a secondary mechanical barrier is a well configuration that includes:

(i) Wellhead components, including casing hanger and seal assembly; and

(ii) Production casing to surface.

(2) Each string of casing is designed to safely contain the expected internal and external pressures and tensile loads.

(3) The surface casing is of sufficient size, weight, grade, competency, and depth to support subsequent drilling operations.

(4) The production casing is of sufficient size, weight, grade, competency, and depth to maintain the well integrity, and is compatible with fluid chemical composition. The production casing is designed to accommodate fluids on injection and withdrawal at the maximum expected operational pressures and velocities. The production casing is free of open perforations or holes other than the planned completion interval(s). Perforations created for investigative or remedial work are sealed to establish hydraulic isolation.

(5) Casing connections are appropriate for use in the well design and exceed the expected mechanical loads.

(6) The gas storage well is cemented so as to maintain the integrity of the storage zone(s) by providing isolation of the reservoir and preventing communication of fluids from the storage zone or other zones of interest.

(7) All casing was cemented in a manner that ensures proper distribution and bonding of cement in the annular spaces. Additionally, cementing operations meet or exceed the following requirements:

(A) Surface casing is cemented with sufficient cement to fill the annular space from the shoe to the surface to protect ground water.

(B) Intermediate and production casings, if not cemented to the surface, are cemented in accordance with the requirements of Section 1722.4.

(8) For new wells, the cementing operations used a cement slurry designed for the anticipated wellbore and formation conditions.

(9) Cement plugs provide for effective zonal isolation.

(10) Any remedial cement slurry and placement techniques are designed for the specific wellbore conditions, formations, and type of repairs.

(11) Cement bond log or evaluation is on file that indicates an adequate cement bond between the casing, cement**,** and geologic formations. A competent cement bond extends across the confining strata, and at least 100 feet above the gas storage reservoir.

(12) For wells equipped with tubing and packer, packer is set in cemented casing within confining strata or other appropriate location.

(c) If the operator does not demonstrate that a gas storage well meets the criteria of subdivision (b), then the operator shall demonstrate that an alternative method of well design and construction has been employed that effectively adheres to the performance standard of subdivision (a). An alternative method of well design and construction under this subdivision shall include both primary and secondary mechanical well barriers to isolate the storage gas

within the storage reservoir and transfer storage gas from the surface into and out of the storage reservoir. The Division will determine on a case-by-case basis whether the operator has effectively demonstrated that a gas storage well that does not conform to the criteria in subdivision (b) meets the performance standard in subdivision (a).

(d) The requirements of this section are in addition to all other well construction requirements of this chapter.

Authority: Sections 3013, 3106 and 3180, Public Resources Code. Reference: Sections 3106, 3180, 3220 and 3403.5, Public Resources Code.

§ 1726.6. Mechanical Integrity Testing.

(a) The operator shall, at a minimum, conduct the following mechanical integrity testing on each gas storage well and every other well that penetrates the gas storage reservoir of the operator's underground gas storage project, with the exception of wells that have been plugged and abandoned in accordance with Public Resources Code section 3208:

(1) A temperature and noise log shall be conducted at least annually to ensure integrity. Logging shall include a repeat section of no less than 200 feet, preferably across intervals where anomalies are present. If an anomaly is identified that indicates a possible loss of or threat to the mechanical integrity of the well, then the operator shall immediately report the anomaly to the appropriate district office. If the operator is unable to explain any anomaly, then the well shall not be used for injection or withdrawal without subsequent approval from the Division.

(2) A casing wall thickness inspection to estimate internal and external corrosion, employing such methods as magnetic flux or ultrasonic technologies, shall be performed at least once every 24 months to determine if there are possible issues with casing integrity. Logging shall include a repeat section of no less than 200 feet, preferably across intervals where anomalies are present. The results shall be compared against prior results and any other available data to determine the corrosion rate. If the casing wall thickness inspection indicates that within the next 24 months thinning of the casing will diminish the casing's ability to contain 115 percent of the well's maximum allowable operating pressure utilizing Barlow's equation or another, similarly effective method, then the well shall be remediated and shall not be used for injection or withdrawal without subsequent approval from the Division. The Division may approve a less frequent casing wall thickness inspection schedule for a well if the operator demonstrates that the well's corrosion rate is low enough that biennial inspection is not necessary.

(3) Pressure testing of the production casing shall be conducted at a minimum frequency determined on a well-by-well basis under Section 1726.3, subdivision (d)(3), provided that the well-specific minimum pressure testing frequency has been reviewed and approved by the Division. If the Division has not approved a well-specific minimum pressure testing frequency for a well as part of the Risk Management Plan, then the operator shall pressure test the well at least once every 24 months. If injection in the gas storage well is through tubing and packer, then the pressure test shall be of the casing-tubing annulus of the well. Pressure testing shall be conducted in accordance with the parameters specified in Section 1726.6.1. If a

required pressure test is not successfully completed, then the operator shall immediately notify the Division and the well shall not be used for injection or withdrawal without subsequent approval from the Division.

(b) A newly constructed gas storage well, or a reworked gas storage well that has had its existing production casing modified from its previous condition during rework activities, shall be tested in accordance with subdivision (a) prior to use. The Division may waive some or all of the mechanical testing requirements for a reworked gas storage based on the nature of the work performed.

(c) The Division may require additional testing as needed to demonstrate the integrity of the well.

(d) The appropriate district office shall be notified at least 48 hours before performing mechanical integrity testing so that Division staff may have an opportunity to witness the testing. All mechanical integrity testing shall be documented and copies of test results shall be submitted to the Division in an electronic format within 30 days.

Authority: Sections 3013, 3106 and 3180, Public Resources Code. Reference: Sections 3106, 3180, 3181, 3220 and 3403.5, Public Resources Code.

§ 1726.6.1. Pressure Testing Parameters.

(a) Pressure testing required under Section 1726.6 shall be conducted according to the following parameters:

(1) Pressure testing shall be conducted with a liquid unless the Division approves pressure testing with gas.

(2) If pressure testing will be conducted with a liquid that contains additive other than brine, corrosion inhibitors, or biocides, then the operator shall consult with the Division regarding the contents of the liquid prior to commencing testing.

(2) The wellbore shall be filled with a stable column of fluid that is free of excess gasses.

(3) Pressure tests shall be recorded and a calibrated gauge shall be used that can record a pressure with an accuracy within one percent of the maximum allowable injection pressure.

(4) Pressure tests shall be conducted at an initial test pressure of at least 115 percent of the maximum allowable injection pressure at the wellhead.

(5) The pressure test shall be continuous for one hour. A pressure test is successful if the pressure gauge does not show more than a 10 percent decline from the initial test pressure in the first 30 minutes, and does not show more than a 2 percent decline from the pressure after the first 30 minutes in the second 30 minutes.

(b) The Division may modify the testing parameters on a case-by-case basis if, in the Division's judgment, the modification is necessary to ensure an effective test of the integrity of the casing.

Authority: Sections 3013, 3106 and 3180, Public Resources Code. Reference: Sections 3106, 3180, 3181, 3220 and 3403.5, Public Resources Code.

§ 1726.7. Monitoring Requirements.

(a) The operator shall monitor for the presence of gas in all annuli by measuring and recording annular and tubing pressure at least once a day. The operator shall evaluate any anomalous annular gas occurrence and immediately report it to the Division. This requirement may be met by employment of a real-time data gathering system, such as Supervisory Control and Data Acquisition.

(b) The operator shall monitor the material balance of an underground gas storage project's storage reservoir relative to the original design and expected reservoir behavior. The operator shall evaluate and correct unexpected conditions detected during monitoring in order to avoid an incident or loss. Monitoring frequency shall be based on factors such as reservoir and well fluid loss potential and flow potential, as outlined in the Risk Management Plan.

(1) The operator shall submit material balance support data to the Division at least once a year, or upon request by the Division.

(2) Acceptable reservoir integrity monitoring and analysis methods include, but are not limited to, the following four methods:

(A) Monitoring average reservoir pressure versus inventory and comparing that to expected conditions in order to allow for the discovery and correction of any anomalies or unexpected conditions. Liquid level shall be taken into account when utilizing observation wells. Semiannual field shut-in tests, usually conducted at the point of seasonally high and low inventories, shall be conducted for inventory verification.

(B) Installation and monitoring of strategically located observation wells in the vicinity of spill points, within an aquifer, and above the confining strata. Observation wells shall be in potential collector formations to detect the presence or movement of gas.

(C) Monitoring offset hydrocarbon production or disposal operations for unexplained flow or pressure changes. The monitoring shall include operations in zones above and below the storage reservoir as well as laterally offset locations.

(D) Conducting subsurface correlation and gas identification logs such as gamma ray-neutron logs to confirm the location of gas being injected into the intended storage reservoir, as needed.

(c) The operator shall immediately report to the Division any instance of an unintended surface or cellar gas release of any size, in any location within the area of review of the underground gas storage project. Unless the operator demonstrates that the gas is not from the underground gas storage project or a gas storage well, Division may require the operator to chemically fingerprint the gas from such a release, and the operator shall provide the results of the gas analysis to the Division as soon as they are available.

(d) The operator of an underground gas storage project shall employ a real-time data gathering system, such as Supervisory Control and Data Acquisition, by January 1, 2020. At a minimum, the real-time data gathering system shall be deployed and utilized in accordance with the following requirements:

(1) The real-time data gathering system shall include pressure sensors for every casing annulus and tubing with data transmission to an operations center.

(2) The real-time data gathering system shall have alarms set for each annulus to monitor for pressure indicative of potential leaks or potential migration of gas. The alarms shall alert the operations center if pressure exceeds preconfigured set points. For tubing, the alarm set point shall not be higher than the maximum allowable injection pressure at the wellhead. For the annulus between production casing and tubing, the alarm set point shall be determined based on annular fluid, the initial pressure when the packer was set, and operational configuration. For strings without any anticipated surface pressure, such as surface or intermediate casings, the alarm set point shall not be higher than 100 psi or the alarm set point approved under subdivision (d)(3)(C).

(3) If there is sustained casing pressure above 100 psi in a string without anticipated surface pressure, and it is believed to be caused by shallow gas or other fluid migration, then the operator shall do the following:

(A) The operator shall first bleed off annular pressure and track pressure and time for the well to build up pressure back to the observed sustained casing pressure.

(B) Next, the operator shall sample the fluids building up in the annulus and confirm that the accumulation is not due to migration of storage gas by performing chemical fingerprinting or other diagnostic tests approved by the Division.

(C) If the diagnostic testing under subdivisions (A) and (B) confirm that the pressure build-up is not due to migration of storage gas, the operator shall propose an alarm set point to the Division that is no greater than 100 psi above the observed sustained casing pressure, unless such pressure would pose a risk to casing integrity. The operator's proposal shall at a minimum address the results from the diagnostic testing, the effect of the proposed alarm set point pressure on casing integrity, the likely source of pressure and fluid composition determined from chemical fingerprinting, and a long-term monitoring plan. The alarm set point shall not be increased until it has been approved by the Division.

(D) If the observed sustained casing pressure plus 100 psi would pose a risk to the integrity of the casing, then the operator shall develop and implement a plan to address the situation, subject to the Division's approval.

(E) If the testing under subdivisions (A) and (B) indicate that the pressure build-up is due to migration of storage gas, then the operator shall conduct further testing to determine the pathway of migration and take remedial action as needed in accordance with a plan approved by the Division.

(e) The operator of an underground gas storage project shall develop a program, which shall be submitted to the Division for review and approval, to conduct a baseline and subsequent gas detection logs on each gas storage well to detect gas indications behind casing. The operator shall provide the results of the gas detection logs to the Division with comparison of the logs noting any changes in the indicated gas behind the casing. If the comparison indicates increasing gas accumulations behind casing, then the operator shall submit a response plan for the Division's approval.

(f) The operator of an underground gas storage project shall adhere to an inspection and leak detection protocol that has been approved by the Division. The protocol shall include inspection of the wellhead assembly and attached pipelines for each of the gas storage wells

used in association with the underground gas storage project, and the surrounding area within a 100-foot radius of the wellhead of each of the wells used in an underground gas storage project. The inspection protocol shall provide for inspection at least once a day, employing effective gas leak detection technology such as infrared imaging, and shall provide for immediately reporting leaks to the Division. The operator's selection and usage of gas leak detection technology shall take into consideration detection limits, remote detection of difficult to access locations, response time, reproducibility, accuracy, data transfer capabilities, distance from source, background lighting conditions, geography, and meteorology. The Division will consult with the California Air Resources Board when reviewing an inspection and leak detection protocol submitted under this subdivision. The requirements of this subdivision shall cease to apply to an underground gas storage project if the California Air Resources Board approves a monitoring plan under its regulations for that facility.
Authority: Sections 3013, 3106 and 3180, Public Resources Code. Reference: Sections 3106, 3180, 3181, 3220 and 3403.5, Public Resources Code.

§ 1726.8. Inspection, Testing, and Maintenance of Wellheads and Valves.

(a) Where installed, the operator of an underground gas storage project shall test all surface safety valves on the wellhead and all subsurface safety valve systems at least every six months. The tests shall be conducted in accordance with American Petroleum Institute Recommended Practice 14B (6th Edition, September 2015), hereby incorporated by reference, or a Division approved equivalent, to confirm operational integrity. The appropriate district office shall be notified at least 48 hours before performing testing so that Division staff may witness the operations, and documentation of the testing shall be maintained and available for Division review. A closed storage well safety valve system shall be re-opened with operator staff at the site of the valve to ensure the absence of any unforeseen issues. Within 90 days of finding that a surface or subsurface safety valve is inoperable, the operator shall either repair the safety valve or temporarily plug the well. An appropriate alternative timeframe for testing a valve or addressing an inoperable surface or subsurface safety valve may be required by the Division.

(b) At least annually, the operator of an underground gas storage project shall test all valves on the wellhead, including the master valve and wellhead pipeline isolation valve for proper function and verify ability to isolate the well.

(c) The operator shall equip gas storage wells with valves to provide isolation of the wells from the pipeline system and to allow for entry into the wells.

(d) The operator shall equip all ports on the wellhead assembly above the casing bowl of gas storage wells with valves, blind flanges, or similar equipment that are rated to withstand the maximum operational pressures.
Authority: Sections 3013, 3106 and 3180, Public Resources Code. Reference: Sections 3106, 3180, 3181, 3220 and 3403.5, Public Resources Code.

§ 1726.9. Well Leak Reporting.

(a) For the purposes of this section, and for the purposes of Public Resources Code sections 3183 and 3184, "reportable leak" means:

(1) A leak from a gas storage well that is above 50,000 parts per million by volume total hydrocarbons, as measured using methodology that the operator has demonstrated will provide consistent and reliable measurements, such as US EPA Reference Method 21;

(2) A leak from a gas storage well that is above 10,000 parts per million by volume total hydrocarbons, as measured using methodology that the operator has demonstrated will provide consistent and reliable measurements, such as US EPA Reference Method 21, for more than five days; or

(3) Any leak that poses a significant present or potential hazard to public health and safety, property, or to the environment.

(b) If a gas storage well has a reportable leak, then the operator shall immediately inform the Division.

(c) The requirements of this section are in addition to, and do not supersede, any other requirements for reporting or responding to leaks from a gas storage well.

Authority: Sections 3013, 3106 and 3180, Public Resources Code. Reference: Sections 3106, 3180, 3181, 3183, 3184, 3220 and 3403.5, Public Resources Code.

§ 1726.10. Requirements for Decommissioning.

(a) If an operator intends to discontinue an underground gas storage project, then the operator shall submit a Decommissioning Plan to the Division. The Decommissioning Plan is subject to the Division's review and approval and shall ensure that stored gas will continue be confined to the approved zone(s) of injection and that the underground gas storage project will not cause damage to life, health, property, the environment, or natural resources. At a minimum, the Decommissioning Plan shall address all of the following:

(1) Identification of the intended use of the wells and facilities after decommissioning, including a plan for obtaining requisite approvals for the use.

(2) A plan for managing remaining gas in the underground gas storage reservoir.

(3) A plan for repurposing or decommissioning all wells and facilities associated with the underground gas storage project.

(4) Consultation with the California Public Utilities Commission.

(5) Any other information requested by the Division on a project-specific basis.

(b) An underground gas storage project is subject to the requirements of this article until the Division has approved a Decommissioning Plan and the Division has certified that the operator has completed all steps required under the Decommissioning Plan to the Division's satisfaction.

Authority: Sections 3013, 3106 and 3180, Public Resources Code. Reference: Sections 3106, 3180, 3181, 3220 and 3403.5, Public Resources Code.

Subchapter 1.1 Offshore Well Regulations

Article 1. General

§ 1740. Purpose.

It is the purpose of this subchapter to set forth the rules and regulations governing the drilling, redrilling, production, maintenance, and plugging and abandonment of offshore oil and gas wells in accordance with the provisions of Division 3 of the Public Resources Code.
Authority: Sections 3000-3013 and 3106, Public Resources Code. Reference: Sections 3203-3220 and 3227-3237, Public Resources Code.

§ 1740.1. Policy.
Section 3106 of Division 3 of the Public Resources Code will be administered with the objective of furthering declared legislative policy; namely, that the Supervisor shall supervise drilling, operation, maintenance, and plugging and abandonment of wells to prevent as far as possible, damage to life, health, property, and natural resources, damage to underground oil and gas deposits from infiltrating water and other causes, loss of oil, gas, or reservoir energy and damage to underground and surface waters suitable for irrigation or domestic purposes by the infiltration of, or the addition of detrimental substances by reason of the drilling, operation, maintenance, or plugging and abandonment of wells.

§ 1740.2. Scope of Regulations.
They shall apply to any and all oil or gas well operations conducted from locations within the offshore territorial boundaries and inland bays of the State of California, and where in conflict, the existing regulations shall supersede any and all previous rules, regulations, and requirements pertaining to the operations previously stated.

§ 1740.3. Revision of Regulations.
The Supervisor at appropriate intervals, or as the need arises, may review and issue special regulations or change present regulations, and such special regulations or changes shall prevail against general regulations if in conflict therewith. Public hearings on such special issues or changes will be held if required.

§ 1740.4. Incorporation by Reference.
Any documents or part therein incorporated by reference herein are a part of this regulation as though set out in full.

§ 1740.5. Approval.
Written approval of the Supervisor is required prior to commencing drilling, reworking, injection, plugging, or abandonment operations. Temporary approval to commence such operations, however, may be granted by the Supervisor or his or her representative when such operations are necessary to avert a threat to life, health, property, or natural resources, or when approved operations are in progress and newly discovered well condition are such that immediate corrective or abandonment operations are desirable. Such temporary approval shall be granted only after the operator has provided the Division with all information pertaining to the condition of the well, including but not limited to, geological, mechanical, and the results of tests and

surveys. Notwithstanding any such temporary approval, the operator shall immediately file a written notice of intention to carry out a program temporarily approved.

An operator shall act immediately to correct a condition which creates a clear and present danger to life, health, property, or natural resources and shall immediately notify the Division of the condition and the action taken to correct it.

Article 2. Definitions

§ 1741. Definitions.

Unless this context otherwise requires, the following definitions shall apply to these regulations:

(a) “District” means oil and gas district as provided for in Section 3105 of Division 3 of the Public Resources Code.

(b) “Division,” in reference to the government of this state, means the Division of Oil, Gas, and Geothermal Resources in the Department of Conservation.

(c) “Drilling fluid” means the fluid used in the hole during drilling or other proposed operations.

(d) “Field” means the same general surface area which is underlaid or reasonably appears to be underlaid by one or more pools.

(e) “Field rules” means unique requirements or procedures which may be established by the Supervisor for a producing field.

(f) “Gas” means any natural hydrocarbon gas coming from the earth.

(g) (Reserved)

(h) “Oil” includes petroleum, and “petroleum” includes oil.

(i) “Operations” means any one or all of the activities of an operator covered by Division 3 of the Public Resources Code.

(j) “Operator” means any person drilling, maintaining, operating, pumping, or in control of any well.

(k) “Pool” means an underground reservoir containing, or appearing at the time of determination to contain, a common accumulation of crude petroleum oil or natural gas or both. Each zone of a general structure which is separated from any other zone in the structure is a separate pool.

(l) “Rework” means any operation subsequent to drilling that involves deepening, redrilling, plugging, or permanently altering in any manner the casing of a well or its function.

(m) “String” means a continuous length of connected joints of casing, liner, drill pipe or tubing run into the well, including all attached drilling, cementing, testing, producing, safety, and gravel-pack equipment.

(n) “Supervisor” means the State Oil and Gas Supervisor.

(o) “Well” means any oil or gas well or well for the discovery of oil or gas, or any well on lands producing or reasonably presumed to contain oil or gas or 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 oil field waste fluids 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.
Authority: Section 3106, Public Resources Code. Reference: Sections 3000-3014, Public Resources Code.

Article 3. Regulations

§ 1742. Well Identification.

(a) The number or designation, which includes the lease name when used, by which a well shall be known is subject to the approval of the Supervisor and shall not be changed without the written consent of the Supervisor.

(b) Identification of wells. The well designation shall be affixed to the wellhead or guard rail of each completed well. Wells completed from two or more zones shall have the zones individually identified at the wellhead. The Supervisor may approve existing well identification methods if they substantially comply with the intent of this section. Identifying signs shall be maintained in a legible condition.

(c) Platforms, islands, or other fixed structures shall be identified at two diagonal corners of the platform or structure by a sign with letters and figures not less than 12 inches in height with the following information: the platform or structure designation, the name of lease operator, and the lease designation. The Supervisor may approve abbreviations.

(d) Non-fixed platforms or structures shall be identified by two (2) signs with letters and figures not less than 12 inches in height affixed to opposite sides of the derrick to be visible from off the vessel with the following information: the name of the operator and the lease designation.

§ 1743. General Requirements.

(a) It is understood that this Division's approval of operations is contingent upon the continual fulfillment of all marine and pollution control requirements established by the U. S. Coast Guard and the State of California.

(b) All operations are to be conducted in a proper and workmanlike manner in accordance with good oil field practice.

(c) All installations shall comply with applicable provisions of Safety Orders of the State Division of Industrial Safety, including the Petroleum Safety Orders, the General Industry Safety Orders and the Unfired Pressure Vessel Safety Orders.

(d) An approved oil spill contingency plan that includes provisions for rapid deployment of containment and recovery equipment shall be in effect, and a copy of the plan shall be on file with this Division prior to commencing operations.

(e) An approved plan for blowout prevention and control, “kick control plan,” including provisions for duties, training, supervision, and schedules for testing equipment and drills, shall be on file with the Division prior to commencing operations.

(f) Tubing, casing, or annulus open to an oil or gas zone shall be sealed off or equipped with a device to shut it in at the surface.

(g) A copy of the operator's proposals on Division forms and subsequent approval of proposed operations by the Division shall be available at the wellsite throughout such operations.

(h) Operators shall give adequate prior notice to the Division's office of the district in which a well is located, of the time for inspections, and tests required by the Division.

(i) Operations shall not deviate from the approved basic program without prior approval of the Division. Additional requirements may be made at that time.

(j) Oil spills or slicks shall be reported to the agencies as specified in the California Oil Spill Disaster Contingency Plan and in the National Oil Hazardous Substances Pollution Contingency Plan.

(k) Blowouts, fires, hazardous gas leaks, disasters, major accidents, or similar incidents on or emanating from an oil or gas drilling, producing, or treating facility shall be reported to the Division immediately.

Authority: Section 3106, Public Resources Code. Reference: Section 3203, Public Resources Code.

§ 1744. Drilling Regulations.

All exploratory wells and initial development wells on offshore sites shall be drilled or reworked in accordance with these regulations, which shall continue in effect until field rules are established. After field rules have been established, development wells shall be drilled or reworked according to such rules.

(a) Where sufficient geologic and engineering information is available from previous drilling, operators may make application to the Supervisor for the establishment of field rules for each oil or gas pool or zone. The Supervisor shall review field rules at least once a year and notify operators in writing of any change.

(b) Drilling or reworking of wells shall not commence without approval of the Division. Notices of intention and approvals shall be considered cancelled if the proposed operations are not commenced within one year of receipt of the notice. Each proposal to drill or rework a well shall include all information required on Division forms and a detailed work program including, when applicable, casing, cementing, drilling fluid, and blowout prevention programs, proposed bottom hole location, anticipated location of the intersection of each proposed zone of completion with the bore hole, anticipated pressures, and anticipated depths (both measured and vertical) of geologic formations, oil zones, gas zones, and freshwater zones. The casing, cementing, drilling fluid, and blowout prevention programs shall comply with either the following requirements or established field rules.

§ 1744.1. Casing Program.

All wells shall be cased and cemented in a manner that will fulfill the requirements of Sections 3106, 3219, 3220, and 3222 of Division 3 of the Public Resources Code. The proposal to drill, redrill, or deepen shall include a casing program designed to provide for firm anchorage and for full protection of all oil, gas, or fresh water zones. All casing strings shall be new pipe or equivalent, capable of withstanding all anticipated collapse and burst pressures to be

encountered or used. For the purpose of these regulations, the several strings in order of normal installation are conductor, first surface, second surface, intermediate, protective, and production.

Casing strings shall be run and cemented prior to drilling below the specified setting depth, subject to minor variations necessary to allow the casing to be set in firm compacted or consolidated stratum. All depths refer to true vertical depth (TVD) below the ocean floor, unless otherwise specified. Determination of proper casing setting depths shall be based upon all geological and engineering factors, including but not limited to the presence or absence of hydrocarbons, formation pressures, fracture gradients, lost circulation intervals, and the degree of compaction or consolidation of formations.

§ 1744.2. Description of Casing Strings.

Names of strings used by the Division are not always the same as those used by the federal government for wells drilled on the Outer Continental Shelf. Where there is a difference, the Division name is given first followed by the federal name shown in parentheses.

(a) Conductor casing (drive or structural). This casing may be set by drilling, driving, or jetting to a depth of approximately 100 feet to provide hole stability for initial drilling operations. This casing may be omitted, when approved by the Division, if there is geological evidence that hydrocarbons will not be encountered while drilling the hole for the first surface casing and is not needed for hole stability.

(b) First surface casing (conductor). This casing shall be set at a minimum depth of 300 feet or a maximum depth of 500 feet provided that this casing string shall be set before drilling into shallow strata known to contain oil or gas or, if unknown, upon encountering such strata.

(c) Second surface casing (surface). This casing shall be set at a minimum depth of 1,000 feet or a maximum depth of 1,200 feet below the ocean floor, but may be set as deep as 1,500 feet, in the event the surface casing is set at a depth at least 450 feet.

(d) Intermediate casing. This casing shall be set if the proposed total depth of the well is more than 3,500 feet. When surface casing is set at deeper than 1,000 feet, the proposed total depth of the well may be extended two (2) feet for each foot of surface casing below 1,000 feet.

Proposed Total Depth of Well or Proposed Depth of First Full String of Protective Casing (TVD in Feet Below Ocean Floor)	Setting Depth for Intermediate Casing (TVD in Feet Below Ocean Floor)	
	Minimum	**Maximum**
3,500 - 4,500	1,500	4,500
4,500 - 6,000	1,750	4,500
6,000 - 9,000	2,250	4,500
9,000 - 11,000	2,750	4,500
11,000 - 13,000	3,250	4,500
13,000 - Below	3,500	4,500

(e) Protective casing. This casing shall be set when required by well conditions, such as lost circulation or abnormal pressures. When this string does not extend to the surface, the lap shall be cemented and tested by a fluid entry test to determine whether a seal between the protective string and next larger string has been achieved. The test shall be witnessed and approved by a Division inspector and recorded on the driller's log.

(f) Production casing. This casing shall be cemented as noted in Section 1744.3 below and a test of water shut-off made above the zones to be produced or injected into. The test shall be witnessed and approved by a Division inspector before completing the well for production or injection. In injection wells, the Supervisor may approve the demonstration of the shut-off by running of a survey within 30 days after injection commences. The survey must show that injection fluid is confined to the approved injection interval.

When the production string does not extend to the surface, the lap between the production string and next larger casing string shall be cemented and tested as in the case of protective casing. The surface casing shall never be used as production casing unless all lower oil or gas zones are properly plugged.

§ 1744.3. Cementing Casing.

The conductor (if drilled or jetted) and surface casings shall be cemented with sufficient cement to fill the annular space back to the ocean floor. The intermediate casing shall be cemented with sufficient cement to fill the annular space back to the ocean floor or at least 200 feet into the next larger string of pipe. The protective and production casings shall be cemented so that all fresh water zones, oil or gas zones, and abnormal pressure intervals are covered or isolated, and, in addition, a calculated volume sufficient to fill the annular space to at least 500 feet above cementing points, above oil or gas zones, and above abnormal pressure intervals not previously cased. When the cement behind casing is not returned to the ocean floor or through a lap, the amount of solid cement fill behind casing shall be determined by surveys acceptable to the Supervisor. If the annular space is not adequately cemented by the primary operation, the operator shall displace sufficient cement to fill the required annular space. Upon demonstrating shut-off above the zones to be produced or injected into as indicated under (f) above, the operator may continue with the approved operations.

§ 1744.4. Pressure Testing.

Prior to drilling out the plug after cementing, all blank casing strings, except the conductor casing, shall be pressure tested as shown in the table below. Loss in pressure shall not exceed 10 percent during a 30 minute test; corrective measures must be taken until a satisfactory test is obtained.

Casing String	Minimum Surface Test Pressure
First surface	1 psi/ft. of depth
Second surface	1,000 psi
Intermediate, protective and production	1,500 psi or 0.2 psi/ft. whichever is greater

After cementing any of the above strings, drilling shall not be commenced until a time lapse of: eight hours for the first surface casing string and 12 hours for all other casing strings, or sufficient time for the bottom 500 feet of annular cement fill to attain a compressive strength of at least 500 psi based on a pretest of the slurry at the temperature and pressure at the cementing depth, using testing procedures as set forth by the American Petroleum Institute in RP 10B, 1972, incorporated here by reference.

All casing pressure tests shall be witnessed and approved by a Division inspector prior to drilling out of the casing or perforating opposite possible oil or gas zones. Inspection of data recorded by a device approved by the Division may be substituted for witnessing.

§ 1744.5. Blowout Prevention and Related Well-Control Equipment.
This equipment shall be installed, tested, used, and maintained in a manner necessary to prevent an uncontrolled flow of fluid from a well. Division personnel shall use the current edition of Division of Oil, Gas, and Geothermal Resources Manual No. M07, “Oil and Gas Well Blowout Prevention in California,” as a guide in establishing the blowout prevention equipment requirements specified in the Division's approval of proposed operations.
Authority: Section 3106, Public Resources Code. Reference: Section 3219, Public Resources Code.

§ 1744.6. Drilling Fluid Program—General.
The characteristics, use, and testing of drilling fluid and the method of conducting related drilling procedures shall be such as are necessary to prevent the uncontrolled flow of fluid from any well. Quantities of drilling fluid materials sufficient to insure well control shall be maintained readily accessible for immediate use at all times.

(a) Drilling fluid control. Before starting out of the hole with drill pipe, the drilling fluid shall be circulated with the drill pipe hung just off bottom until the drilling fluid is properly conditioned. Proper conditioning requires circulation of the drilling fluid to the extent that the total annulus volume is displaced and until gas is removed. When coming out of the hole with drill pipe or tubing, the annulus shall be filled with drilling fluid before the drilling fluid level drops below a calculated depth of 100 feet below the derrick floor. A mechanical device that indicates the amount of drilling fluid required to keep the hole full shall be watched. If there is any indication of “swabbing” or influx of formation fluids, the inside blowout preventer shall be installed on the drill pipe, the drill pipe shall be run to bottom, and the drilling fluid properly conditioned. The drilling fluid shall not be circulated and conditioned except on or near bottom, unless well conditions prevent running the pipe to bottom. The fluid in the hole shall be circulated or reverse circulated prior to pulling drill-stem test tools from the hole.

(b) Drilling fluid testing equipment. Drilling fluid testing equipment for measuring viscosity, water loss, weight, and thixotropic properties shall be maintained on the drillsite at all times. Tests of the drilling fluid consistent with good operating practice shall be performed at the beginning of each eight-hour tour while drilling, with additional tests as conditions warrant.

Results of tests shall be recorded on the driller's log. The following or comparable equipment for monitoring the drilling fluid system must be installed with the indicators at the driller's station and used throughout the period of drilling after setting and cementing the first surface casing.

(1) A recording mud-pit level indicator to determine mud pit volume gains and losses. This indicator shall include a visual and audible warning device.

(2) A mud volume measuring device for accurately determining mud volumes required to maintain fluid level at the surface while pulling the drill pipe from the hole.

(3) A mud return or full hole indicator to show when returns have been obtained, or when they occur unintentionally, and also to determine that returns essentially equal the pump discharge rate.

(c) Inspection of the complete drilling fluid system shall be made by a Division inspector. Approval of the system is required prior to drilling out the shoe of the first surface casing.

§ 1745. Plugging and Abandonment.

Plugging and abandonment operations shall not commence until approval has been obtained from the Supervisor. Proposals to plug or plug and abandon shall be submitted on a Division form for plugging or plugging and abandonment and accompanied by a detailed work program. The proposed plugging and abandonment program shall be deemed to have been approved if the Supervisor does not give the operator a written response to the notice of intention within ten (10) working days. Under circumstances specified in Section 1740.5, the operator may receive conditional approval to commence operations.

The operator shall comply with the following minimum requirements which have general application to all wells. The Supervisor may approve or require specific plugging materials and methods of operation to fulfill or exceed the minimum requirements.

§ 1745.1. Permanent Plugging and Abandonment.

(a) Plugging in uncased hole. In uncased portions of wells, cement plugs shall be placed to extend from total depth or at least 100 feet below each oil or gas zone, whichever is less, to at least 100 feet above the top of each zone, and a cement plug at least 200 feet long shall be placed across an intrazone freshwater-saltwater interface or opposite impervious strata between fresh- and saltwater zones so as to confine the fluids in the strata in which they are found and to prevent them from escaping into other strata.

(b) Isolation of open hole. Where there is open hole immediately below casing, a cement plug shall be placed in the deepest cemented casing string from total depth or at least 100 feet below the casing shoe, whichever is less to at least 100 feet above the casing shoe.

(c) Plugging perforated intervals. A cement plug shall be placed opposite all perforations extending to a minimum of 100 feet above the perforated intervals, liner top, cementing point, or zone, whichever is higher.

(d) Isolating zones behind cemented casing. Inside cemented casing, a cement plug at least 100 feet long shall be placed above each oil or gas zone and above the shoe of the intermediate or second surface casing; a cement plug at least 200 feet long shall also be placed

across an intrazone freshwater-saltwater interface or opposite impervious strata between fresh- and saltwater zones.

§ 1745.2. Junk in Hole or Collapsed Casing.
In the event that junk cannot be removed from the hole, and the hole below the junk is not properly plugged, cement plugs shall be placed as follows:

(a) Sufficient cement shall be squeezed through the junk to isolate the lower oil, gas, or fresh water zones and a minimum of 100 feet of cement shall be placed on top of the junk, but no higher than the sea bed.

(b) If the top of the junk is opposite uncemented casing, the casing annulus immediately above the junk shall be cemented with sufficient cement to insure isolation of the lower zones.

§ 1745.3. Plugging of Casing Stubs.
If casing is cut and recovered, other than that pulled for placing the surface plug, a cement plug shall be placed from at least 100 feet below to at least 100 feet above the stub.

§ 1745.4. Plugging of Annular Space.
No annular space that extends to the ocean floor shall be left open to drilled hole below. If this condition exists, a minimum of 200 feet of the annulus immediately above the shoe shall be plugged with cement.

§ 1745.5. Surface Plug Requirement.
A cement plug at least 100 feet long shall be placed in the well with the top between 50 and 150 feet below the ocean floor. All inside casing strings with uncemented annuli shall be pulled from below the surface plug. The casing shall not be shot or cut in a manner that will damage outer casing strings and prevent reentry into the well.

§ 1745.6. Testing of Plugs.
Division tests for the location and hardness of cement plugs shall be verified by placing the total weight of the pipe string on the plug, or where there is sufficient depth, an open-end pipe weight of at least 10,000 pounds.

§ 1745.7. Mud.
Any interval of the hole not plugged with cement shall be filled with mud fluid of sufficient density to exert hydrostatic pressure exceeding the greatest formation pressure encountered while drilling such interval.

§ 1745.8. Clearance of Location.
All casing and anchor piling shall be cut and removed from not more than 5 feet below the ocean floor, and the ocean floor cleared of any obstructions, unless prior approval to the contrary is obtained from the appropriate marine navigation and wildlife agencies and a copy of the approval filed with the Division.

§ 1745.9. Temporary Abandonments.

Any well that is to be temporarily abandoned shall be mudded and cemented as required for permanent plugging and abandonment, but requirements of Sections 1745.1(d), 1745.4, 1745.5, and 1745.8 of this article may be omitted. For ocean-floor and platform sites, a mechanical bridge plug (retrievable or permanent) shall be set in the well between 15 and 200 feet below the ocean floor. For land fill, pier, and island sites, the well shall be securely capped or closed at the surface, until operations are resumed.

§ 1745.10. Witnessing of Operations.

Operations to be witnessed by a Division inspector include tests for location and hardness of plugs placed across oil or gas zones open to the well, across fresh water zones, across casing shoes, cementing through junk, and placing of the surface plug. Geologic or mechanical conditions may require changes or additions to the schedule of inspections.

§ 1746. Well Records.

The operator of any well shall keep, or cause to be kept, an accurate record of each well consisting of but not limited to the following:

(a) A log and history for each well showing chronologically the following applicable data:

(1) Character and depth of formations, water-bearing strata, oil and gas-bearing zones, and lost circulation zones encountered.

(2) Casing size, kind, top, bottom, perforations, and attached equipment used.

(3) Tubing size, and depth, type and location of packers, safety devices, and other tubing equipment used.

(4) Hole size.

(5) Cementing and plugging operations including time, depth, slurry volume and composition, fluid displacement, fill, pressures used, and down-hole equipment used.

(6) Drillstem and formation tests including time, depth, pressures, and recovery (volume and description).

(7) BOPE installation, inspections, pressure tests, and drills.

(8) Shut-off, pressure, and lap tests of casing.

(9) Depth and type of all electrical, physical or chemical logs, tests, or surveys run.

(10) Wellhead specifications and method of production.

(b) Core record showing the depth, character, and fluid content of all cores, including sidewall cores, so far as determined.

(c) Filing records.

(d) Records at wellsite.

§ 1746.1. Filing Records.

Well records shall be filed in accordance with the provisions of Sections 3215 or 3216, Article 4, Public Resources Code.

Authority: Sections 3000-3013 and 3016, Public Resources Code. Reference: Sections 3203-3220 and 3227-3237, Division 3, Chapter 1, Article 4, Public Resources Code.

§ 1746.2. Records of Wellsite.

During the performance of proposed operations, a copy of a well's tour reports shall be maintained at the wellsite. All pertinent well records shall be made available to the Division inspector upon request.

Authority: Sections 3000-3013 and 3016, Public Resources Code. Reference: Sections 3203-3220 and 3227-3237, Division 3, Chapter 1, Article 4, Public Resources Code.

§ 1747. Safety and Pollution Control.

Operators shall equip wells and associated facilities with necessary safety devices and establish procedures as follows:

(a) Subsurface safety device. All wells capable of flowing oil or gas to the ocean floor shall be equipped with a surface controlled subsurface tubing safety valve installed at a depth of 100 feet or more below the ocean floor. Such device shall be installed in all oil and gas wells, including artificial lift wells, unless proof is provided to the Supervisor that such wells are incapable of any natural flow to the ocean floor. For shut-in wells capable of flowing oil or gas, a tubing plug may be installed, in lieu of a subsurface safety device, and such plug shall also be installed when required by the Supervisor.

(b) Subsurface safety devices shall be adjusted, installed, and maintained to insure reliable operation. When a subsurface safety device is removed from a well for repair or replacement, a standby subsurface safety device or tubing plug shall be available at the well location, and shall be immediately installed within the limits of practicability, consideration being given to time, equipment, and personnel safety. All wells in which subsurface safety device or tubing plug is installed shall have the tubing-casing annulus sealed below the valve or plug setting depth.

(c) Each subsurface safety device and tubing plug installed in a well shall be tested at intervals not exceeding one month and a report filed with the Division within five (5) days. Failures shall be reported to the Division immediately. The tests shall be performed in the presence of a Division inspector following installation or reinstallation and at 90-day intervals thereafter. The Supervisor may adjust the testing sequence based on equipment performance.

(d) The control system for the surface-controlled subsurface safety devices shall be an integral part of the shut-in system for the production facility.

(e) The operator shall maintain records, available at the structure or facility to any representative of the Division, showing the present status and history of each subsurface safety device or tubing plug, including dates and details of inspection, testing, repairing, adjustment, and reinstallation or replacement.

Authority: Section 3106, Public Resources Code. Reference: Sections 3106 and 3219, Public Resources Code.

§ 1747.1. Safety and Pollution Control Equipment Requirements.

The following requirements shall apply to all offshore production facilities. Sections 1747.3, 1747.4, and 1747.9 shall also apply to mobile drilling structures. Sections 1747.2 and 1747.10 shall also apply to ocean floor completions or wells with submerged wellheads.

(a) The following devices shall be installed and maintained in an operating condition on all pressurized vessels and water separation facilities when such vessels and separation facilities are in service. The operator shall maintain records on the structure or facility showing the present status and history of each such device including dates and details of inspection, testing, repairing, adjustment, and reinstallation or replacement.

(1) All separators shall be equipped with high-low pressure shut-in sensors, low level shut-in controls, and a relief valve. High liquid level control devices shall be installed when the vessel can discharge to a gas vent line.

(2) All pressure surge tanks shall be equipped with a high and low pressure shut-in sensor, a high level shut-in control, gas vent line, and relief valve.

(3) Atmospheric surge tanks shall be equipped with a high level shut-in sensor.

(4) All other hydrocarbon handling pressure vessels shall be equipped with high-low pressure shut-in sensors, high-low level shut-in controls, and relief valves, unless they are determined by the Supervisor to be otherwise protected. All low pressure systems connected to high pressure systems shall be equipped with relief valves.

(5) Pilot-operated pressure relief valves shall be equipped to permit testing with an external pressure source. Spring-loaded pressure relief valves shall either be bench-tested or equipped to permit testing with an external pressure source. A relief valve shall be set no higher than the designed working pressure of the vessel. On all vessels with a rated or designed working pressure of more than 400 psi, the high pressure shut-in sensor shall be set no higher than 5 percent below the rated or designed working pressure and the low pressure shut-in sensor shall be set no lower than 10 percent below the lowest pressure in the operating pressure range. On lower pressure vessels the above percentages shall be used as guidelines for sensor settings considering pressure and operating conditions involved, except that sensor setting shall not be within 5 psi of the rated or designed working pressure or the lowest pressure in the operating pressure range.

(6) All pressure-operated sensors shall be equipped to permit testing with an external pressure source.

(7) All gas vent lines shall be equipped with a scrubber or similar separation equipment.

§ 1747.2. Safety Devices.

The following devices shall be installed and maintained in an operating condition at all times when the affected well (or wells) is producing. The operator shall maintain records on the structure or facility showing the present status and history of each such device, including dates and details of inspection, testing, repairing, adjustment, and reinstallation or replacement.

(a) All wells shall have a fail shut-in capability. For pumping wells incapable of natural flow to the ocean floor, an approved power source shut-off system may be used. On all flowing or gas lift wells the wellhead assemblies shall be equipped with an automatic failclose valve.

(b) All flowlines from wellheads shall be equipped with high-low pressure sensors located close to the wellhead. The pressure sensors shall be set to shut-in the well in the event of abnormal pressures in the flowline.

(c) All headers shall be equipped with check valves on the individual flowlines. The flowline and valves from each well located upstream of, and including, the header valves shall withstand the shut-in pressure of that well, unless protected by a relief valve with connections to bypass the header. If there is an inlet valve to a separator, the valve, flowline, and all equipment upstream of the valve shall also withstand shut-in wellhead pressure, unless protected by a relief valve with connections to bypass the header.

(d) All pneumatic, hydraulic, and other shut-in control lines shall be equipped with fusible material at strategic points.

(e) Remote shut-in controls shall be located on the helicopter deck and all exit stairway landings leading to the helicopter deck and to all boat landings. These controls shall be quick-operating devices.

(f) All pressure sensors shall be operated and tested for proper pressure settings monthly. Results of all tests shall be recorded and maintained on the structure or facility.

(g) All automatic wellhead safety valves shall be tested for holding pressure monthly. Results of all tests shall be recorded and maintained on the structure or facility.

(h) Check valves shall be tested for holding pressure monthly for at least four months. At such time as the monthly results are satisfactory, a quarterly test shall be required. Results of all tests shall be recorded and maintained on the structure or facility.

(i) A standard procedure for testing of safety equipment shall be filed with the Division and posted in a prominent place on the structure or facility.

§ 1747.3. Containment.

Curbs, gutters, and drains shall be constructed and maintained in good condition in all deck areas in a manner necessary to collect all contaminants, unless drip pans or equivalent are placed under equipment and piped to a sump which will automatically maintain the oil at a level sufficient to prevent discharge of oil into the ocean waters. Alternate methods to obtain the same results may be approved by the Supervisor. These systems shall not permit spilled oil to flow into the wellhead area of a platform or pier.

§ 1747.4. Emergency Power.

An auxiliary electrical power supply shall be installed to provide emergency power sufficient to operate all electrical equipment required to maintain safety of operation in the event the primary electrical power supply fails. The auxiliary system shall be tested weekly and the results recorded.

§ 1747.5. Fire Protection.

A fire fighting system shall be installed and maintained in an operating condition in accordance with volumes 6 and 7 of the National Fire Codes, 1973, as appropriate, incorporated here by reference. A diagram of the fire fighting system, showing the location of all equipment, shall be

filed with the Division and posted in a prominent place on the structure. The system shall be tested monthly by the operator and a report filed with the Division. Failure of any part of the system shall be reported to the Division immediately.
Authority: Section 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1747.6. Detection System.
An automatic gas detector and alarm system shall be installed and maintained in an operating condition in accordance with the following:

(a) Gas detection systems shall be installed in all enclosed areas containing gas handling facilities or equipment, and in other areas classified as hazardous and defined in API RP 500 B, 1973, and the National Electric Code, 1971, both incorporated here by reference.

(b) All gas detection systems shall be capable of continuous monitoring. The sensitivity shall be maintained at a level that will detect the presence of combustible gas within the areas in which the detection devices are located.

(c) The central control shall be capable of giving an alarm at not higher than 60 percent of the lower explosive limit.

(d) The central control shall automatically activate shut-in sequences and emergency equipment at a point not higher than 90 percent of the lower explosive limit.

§ 1747.7. Installation Application.
An application for the installation and maintenance of any gas detection system shall be filed with the Division for approval and it shall include the following:

(a) Type, location, and number of detection or sampling heads.

(b) Cycling, non-cycling, and frequency information.

(c) Type and kind of alarm and emergency equipment to be activated.

(d) Method used for detection of combustible gas.

(e) Method and frequency of calibration.

(f) A diagram of the gas detection system.

(g) Other pertinent information.

Authority: Section 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1747.8. Diagram.
A diagram of the gas detection system showing the location of all gas detection points shall be filed with the Division and posted in a prominent place at the structure.

§ 1747.9. Electrical Equipment Installation.
All electrical equipment and systems shall be installed in accordance with the California Building Standards Electrical Code, 1971, the National Electric Code, 1971, and API RP 500 B, 1973, incorporated here by reference. On mobile drilling structures, certificated by the U. S. Coast Guard, this equipment shall be installed, protected, and maintained in accordance with the

applicable provisions of CG-259, Electrical Engineering Regulations, 1971, incorporated here by reference.

§ 1747.10. Testing and Inspection.
The safety and pollution control systems shall be tested and inspected every month and a report filed with the Division. Failures shall be reported to the Division immediately. A Division inspector shall witness the tests and inspect the systems at the time production is commenced and at 90-day intervals thereafter. The Supervisor may adjust the testing and inspection sequence based on equipment performance.

(a) After review by the Supervisor and with his or her written approval, existing production facilities that substantially comply with the intent of Sections 1747 through 1747.9 will be exempt from these regulations. However, any changes or additions to existing platforms will comply with these regulations.

(b) The Division shall be notified of all major production facility shutdowns anticipated to be in excess of 24-hour duration, whether intentional or otherwise. When inspected by a Division inspector, a complete shutdown may be substituted for the next scheduled test of some or all of the safety systems.
Authority: Section 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1748. Underground Injection Control
Underground injection projects, as defined in Section 1720.1(p), including offshore underground injection projects, are subject to the provisions of Subchapter 1, Article 4.
Note: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1748.1. Waste Disposal.
All discharges into the ocean shall conform to the requirements of the appropriate Regional Water Quality Control Board.

Subchapter 2. Environmental Protection

Article 1. General

§ 1750. Purpose.
It is the purpose of this subchapter to set forth the rules and regulations governing the environmental protection program of the Division of Oil, Gas, and Geothermal Resources as provided for in Section 3106 of Division 3 of the Public Resources Code.
Authority: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3000 through 3237, Public Resources Code.

§ 1751. Single-Project Authorization.

(a) For the purposes of this section, “single-project authorization” shall mean a single Division approval for multiple applications for permits to perform well stimulation treatments under Public Resources Code section 3160, subdivision (d), and/or notices of intent to drill or rework wells under Public Resources Code section 3203.

(b) A request for a single-project authorization shall include:

(1) Identification of each of the applications and notices that are part of the request;

(2) The applications and notices that comprise the request for a single-project authorization.

(c) The Division will review each application and notice submitted for single-project authorization in the same manner as it would had the application or notice been submitted individually. A single-project authorization shall specify which of the application or notices have been approved and the conditions of each approval.

(d) Operations approved by a single-project authorization that have not commenced within one year shall not be commenced without first obtaining a new approval for those operations from the Division.

Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106, 3160 and 3203, Public Resources Code.

§ 1752. Wells Partially Plugged

(a) Operators shall obtain written approval from the Division prior to partially plugging a well, in accordance with Public Resources Code section 3203.

(b) When partially plugging a well, the operator shall adhere to all requirements for plugging and abandonment of a well except for Sections 1723.5, 1723.6, 1723.7(g) and (h), 1745.5, 1745.8, and 1745.9.

(c) The operator of a well that has been partially plugged shall conduct a pressure test of the casing of the well by April 1, 2024, or by the date the partially plugged well becomes a long-term idle well, whichever is later. If an operator has a long-term idle well that, as of April 1, 2019, has been partially plugged for more than 60 months, then the operator shall conduct a pressure test of the casing by April 1, 2020. After the initial pressure test required under this section, the operator shall conduct a pressure test of the casing of a partially plugged well at least once every 60 months.

(d) Pressure testing required under this section shall be conducted in accordance with the parameters specified in Section 1772.1.1.

(e) Idle wells that are partially plugged and tested in accordance with the requirements of this section are not subject to the testing requirements under Section 1772.1 or the engineering analysis requirements under Section 1772.1.2.

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Section 3106 and 3206.1, Public Resources Code.

Article 2. Definitions

§ 1760. Definitions.

The following definitions are applicable to this subchapter:

(a) “Active gas pipeline” means an in-service pipeline that carries gas in gaseous or vapor phase and may contain fractional amounts of liquids, solids, and other non-hydrocarbon gases.

(b) “Alteration” of a production facility means any action that changes by more than ten percent the total processing capacity, or storage volume of the production facilities within a given secondary containment. “Alteration” does not include activities such as maintenance, replacement, or minor modification of production facilities, or installation of temporary production facilities.

(c) “Catch basin” means a dry sump that is constructed to protect against unplanned overflow conditions.

(d) “Decommission” means to safely dismantle and remove a production facility and to restore the site where it was located in accordance with Sections 1775 and 1776(f).

(e) “Designated waterways” means any named perennial or ephemeral waterways or any perennial waterways shown as solid blue lines on United States Geological Survey topographic maps and any ephemeral waterways that the Supervisor determines to have a direct impact on perennial waterways.

(f) “Environmentally sensitive” means any of the following:

(1) A production facility within 300 feet of any public recreational area, or a building intended for human occupancy that is not necessary to the operation of the production operation, such as residences, schools, hospitals, and businesses.

(2) A production facility within 200 feet of any officially recognized wildlife preserve or environmentally sensitive habitat that is designated on a United States Geological Survey topographical map, designated waterways, or other surface waters such as lakes, reservoirs, rivers, canals, creeks, or other water bodies that contain water throughout the year.

(3) A production facility within the coastal zone as defined in Section 30103(b) of the Public Resources Code.

(4) Any production facility which the Supervisor determines may be a significant potential threat to life, health, property, or natural resources in the event of a leak, or that has a history of chronic leaks.

(g) “Field” means the general surface area that is underlain or reasonably appears to be underlain by an underground accumulation of crude oil or natural gas, or both. The surface area is delineated by the administrative boundaries shown on maps maintained by the Supervisor.

(h) “Flowline” or “injection line” mean any pipeline that connects a well with a gathering line or header.

(i) “Fluid” means liquid or gas.

(j) “Freshwater” means water that contains 3,000 mg/L TDS or less.

(k) “Gas” means any natural hydrocarbon gas coming from the earth.

(l) “Gathering line” means a pipeline (independent of size) that transports liquid hydrocarbons between any of the following: multiple wells, a testing facility, a treating and production facility, a storage facility, or a custody transfer facility.

(m) “Header” means a chamber from which fluid is distributed to or from smaller pipelines.

(n) “Idle well” means any well that for a period of 24 consecutive months has not either produced oil or natural gas, produced water to be used in production stimulation, or been used for enhanced oil recovery, reservoir pressure management, or 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 Public Resources Code 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, or been used for enhanced oil recovery, reservoir pressure management, or injection. An idle well does not include an active observation well.

(o) “Long-term idle well” means any well that has been an idle well for eight or more years.

(p) “Low-priority idle well” means an idle well for which it has been demonstrated that the well:

(1) Does not penetrate a USDW;

(2) Does not indicate any pressure at the surface and is not open to the atmosphere;

(3) Is not in an area of known geologic hazards, such as subsidence, landslides, or a history of damage to wells in the area from seismicity; and

(4) Is not a critical well, is not in an urban area, and does not have an environmentally sensitive wellhead.

(q) “Pipeline” means a tube, usually cylindrical, with a cross sectional area greater than 0.8 square inches (1 inch nominal diameter), through which crude oil, liquid hydrocarbons, combustible gases, and/or produced water flows from one point to another within the administrative boundaries of an oil or gas field. Pipelines under the State Fire Marshall jurisdiction, as specified by the Elder Pipeline Safety Act of 1981 (commencing with § 51010 of the Government Code, and the regulations promulgated thereunder) are exempt from this definition.

(r) “Production facility” means any equipment attendant to oil and gas production or injection operations including, but not limited to, tanks, flowlines, headers, gathering lines, wellheads, heater treaters, pumps, valves, compressors, injection equipment, production safety systems, separators, manifolds, and pipelines that are not under the jurisdiction of the State Fire Marshal pursuant to Section 51010 of the Government Code, excluding fire suppression equipment.

(s) “Out-of-Service” means any production facility that become incapable of containing fluid safely or cannot be shown to operate as designed.

(t) “In-Service” means any production facility that is capable of containing fluid safely and can be shown to operate as designed.

(u) “Secondary containment” means an engineered impoundment, such as a catch basin, which can include natural topographical features, that is designed to capture fluid released from a production facility.

(v) “Sensitive area” means any of the following:

(1) An area containing a building intended for human occupancy, such as a residence, school, hospital, or business that is located within 300 feet of an active gas pipeline and that is not necessary to the operation of the pipeline.

(2) An area determined by the supervisor to present a significant potential threat to life, health, property, or natural resources in the event of a leak from an active gas pipeline.

(3) An area determined by the supervisor to have an active gas pipeline that has a history of chronic leaks.

(w) “Sump” means an open pit or excavation serving as a receptacle for collecting and/or storing fluids such as mud, hydrocarbons, or waste waters attendant to oil or gas field drilling or producing operations.

(1) “Drilling sump” means a sump used in conjunction with well drilling operations.

(2) “Evaporation sump” means a sump containing fresh or saline water which can properly be used to store such waters for evaporation.

(3) “Operations sump” means a sump used in conjunction with an abandonment or rework operation.

(x) “Underground source of drinking water” or “USDW” means an aquifer or its portion which has not been approved by the United States Environmental Protection Agency as an exempted aquifer pursuant to the Code of Federal Regulations, title 40, section 144.7, and which:

(1) Supplies a public water system, as defined in Health and Safety Code section 116275; or

(2) Contains a sufficient quantity of groundwater to supply a public water system, as defined in Health and Safety Code section 116275; and

(A) Currently supplies drinking water for human consumption; or

(B) Contains fewer than 10,000 mg/L TDS.

(y) “Urban area” means a cohesive area of at least twenty-five business establishments, residences, or combination thereof, the perimeter of which is 300 feet beyond the outer limits of the outermost structures.

(z) “Urban pipeline” means that portion of any pipeline within an urban area as defined in this section.

(aa) “Waste water” means produced water that after being separated from the produced oil may be of such quality that discharge requirements need to be set by a California Regional Water Quality Control Board.

NOTE: Authority cited: Sections 3013, 3270 and 3782, Public Resources Code. Reference: Sections 3008, 3010, 3106, 3270 and 3782, Public Resources Code.

§ 1760.1. Definitions.

(a) The following definitions are applicable to this subchapter:

(1) “Aquifer” means a geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

(2) “Aquifer exemption” means an aquifer exemption proposed by the Division and approved pursuant to the Code of Federal Regulations, title 40, section 144.7.

(3) “Hydrocarbon producing zone” means the portion of an aquifer that is hydrocarbon producing, or can be demonstrated to the Division's satisfaction to contain hydrocarbons that considering their quantity and location are expected to be commercially producible.

(4) “TDS” means milligrams per liter of total dissolved solids content.

Authority: Section 3013, Public Resources Code. Reference: Section 3106, Public Resources Code; and 40 C.F.R. 144.7.

§ 1761. Well Stimulation and Underground Injection Projects.

(a) The following definitions are applicable to this subchapter:

(1) “Well stimulation treatment” means a treatment of a well designed to enhance oil and gas production or recovery by increasing the permeability of the formation.

(A) Well stimulation is a short term and non-continual process for the purposes of opening and stimulating channels for the flow of hydrocarbons. Examples of well stimulation treatments include hydraulic fracturing, acid fracturing, and acid matrix stimulation.

(i) Except for operations that meet the definition of “underground injection project” under Section 1761(a)(2), a treatment at pressure exceeding the formation fracture gradient shall be presumed to be a well stimulation treatment unless it is demonstrated to the Division's satisfaction that the treatment, as designed, does not enhance oil and gas production or recovery by increasing the permeability of the formation.

(ii) Except for operations that meet the definition of “underground injection project” under Section 1761(a)(2), a treatment that involves emplacing acid in a well and that uses a volume of fluid equal to or greater than the Acid Volume Threshold for the operation shall be presumed to be a well stimulation treatment unless it is demonstrated to the Division's satisfaction that the treatment, as designed, does not enhance oil and gas production or recovery by increasing the permeability of the formation. For the purpose of determining whether a treatment is greater than the Acid Volume Threshold, the volume of fluid used in a treatment does not include the volume fluid used for a pre-flush that does not use acid or an overdisplacement that does not use acid.

(iii) The searchable index maintained by the Division under Section 1777.4(e) will clearly indicate each submission for a treatment that exceeds the formation fracture gradient or emplaces acid in the well and exceeds the Acid Volume Threshold, and such submissions shall include the Division's determination that the treatment is not a well stimulation treatment and the basis for the determination.

(B) Well stimulation treatment does not include routine well cleanout work; routine well maintenance; routine treatment for the purpose of removal of formation damage due to drilling; bottom hole pressure surveys; routine activities that do not affect the integrity of the well or the formation; the removal of scale or precipitate from the perforations, casing, or tubing; a gravel pack treatment that does not exceed the formation fracture gradient; or a treatment that involves emplacing acid in a well and that uses a volume of fluid that is less than the Acid Volume Threshold for the operation and is below the formation fracture gradient.

(2) “Underground injection project” or “subsurface injection or disposal project” means sustained or continual injection into one or more wells over an extended period in order to add

fluid to a zone for the purpose of enhanced oil recovery, disposal, or storage. Examples of underground injection projects include waterflood injection, steamflood injection, cyclic steam injection, injection disposal, and gas storage projects.

(3) “Acid Volume Threshold” means a volume, in US gallons, per treated foot of well stimulation treatment, calculated as follows:
(((Size of the drill bit diameter in inches that was used in the treated zone / 2 + 36 inches)2 - (bit diameter in inches / 2)2) x 3.14159 x 12 inches x treated formation porosity) / 231 (inches3/gallon).
The lowest calculated or measured porosity in the zone of treated formation shall be the treated formation porosity used for calculating the Acid Volume Threshold.

(b) Well stimulation treatments and underground injection projects are two distinct kinds of oil and gas production processes. Unless a regulation expressly addresses both well stimulation and underground injection projects,

(1) Regulations regarding well stimulation treatments do not apply to underground injection projects; and

(2) Regulations regarding underground injection projects do not apply to well stimulation.

(3) If well stimulation treatment is done on a well that is part of an underground injection project, then regulations regarding well stimulation treatment apply to the well stimulation treatment and regulations regarding underground injection projects apply to the underground injection project operations.

Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106, 3157 and 3160, Public Resources Code.

Article 3. Requirements

§ 1770. Oilfield Sumps.

(a) Location. Sumps for the collection of waste water or oil shall not be permitted in natural drainage channels. Contingency catch basins may be permitted, but they shall be evacuated and cleaned after any spill. Unlined evaporation sumps, if they contain harmful waters, shall not be located where they may be in communication with freshwater-bearing aquifers.

(b) Construction. Sumps shall be designed, constructed, and maintained so as to not be a hazard to people, livestock, or wildlife including birdlife.

(1) To protect people, sumps in urban areas shall be enclosed in accordance with Section 1778 (a) or (e) and (c).

(2) In non-urban areas, to protect people and livestock and to deter wildlife, an enclosure shall be constructed around sumps in accordance with Section 1778 (b) or (e).

(3) Any sump, except an operations or drilling sump, which contains oil or a mixture of oil and water shall be covered with screening to restrain entry of wildlife in accordance with Section 1778(d).

(4) A sump need not be individually fenced if the property or the production facilities of which the sump is a part is enclosed by proper perimeter fencing.

(c) Drilling Sumps. All free fluids shall be removed from drilling sumps within 30 days after the date the drill rig is disconnected from the well.

(d) Operations Sumps. All free fluids shall be removed from operations sumps within 14 days after the rig removal or from completion of operations, whichever occurs first.

Authority: Sections 3013, 3106, 3270 and 3782, Public Resources Code. Reference: Sections 3106, 3270 and 3783, Public Resources Code.

§ 1771. Channels.

Open unlined channels and ditches shall not be used to transport waste water which is harmful to underlying freshwater deposits. Oil or water containing oil shall not be transported in open unlined channels or ditches unless provisions are made so that they are not a hazard as determined by the Supervisor.

Authority: Sections 3013 and 3106, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1772. Idle Well Inventory and Evaluation

(a) Operators shall submit an Idle Well Inventory and Evaluation to the Division that provides all of the following information for each of the operator's idle wells:

(1) API number and name of the idle well;

(2) Date the well was spudded;

(3) Identification of any surface obstacles or impediments on the surface preventing access to an idle well, including but not limited to buildings or structures, surface-use activities, irrigation systems, roads, terrain, or restricted access;

(4) Results of the most recent mechanical integrity testing for the idle well, including the type of test, the date of the test, the results of the test, and a description of any remediation of the well subsequent to the test;

(5) Whether the idle well penetrates freshwater;

(6) Whether it has been demonstrated to the Division that the idle well does not penetrate a USDW;

(7) Identification of the current tubing and casing pressures for the idle well, or indication that the well is open to the atmosphere;

(8) Whether the idle well is a critical well, is in an urban area, or has an environmentally sensitive wellhead;

(9) Whether the idle well is located in an area of known geologic hazard, such as subsidence, landslides, or a history of damage to wells in the area from seismicity;

(10) Indication of known downhole issues with the idle well that would make it difficult to either reactivate the well or plug and abandon the well, such as known holes in casing, collapsed casing, stuck rods, packer, or fish; and

(11) Whether the idle well is partially plugged in accordance with Section 1752.

(b) Operators shall submit their Idle Well Inventory and Evaluation to the Division in a digital format by January 31, 2021, or within one year after becoming the operator of an idle well, whichever comes later. The Division may allow additional time for submittal of the Idle Well

Inventory and Evaluation on a case-by-case basis based on the operator's total number of idle wells and particular obstacles the operator faces in compiling the information. Unless requested by the Division, information that has previously been submitted to the Division is not required to be resubmitted. After initial submission, operators shall update their Idle Well Inventory and Evaluation annually and submit it to the Division by January 31 of each year.
NOTE: Authority cited: Section 3013 and 3206.1, Public Resources Code. Reference: Sections 3106, 3206 and 3206.1, Public Resources Code.

§ 1772.1. Testing of Idle Wells

(a) Operators shall test each of their idle wells as follows:

(1) Within 24 months of a well becoming an idle well, the operator shall conduct a fluid-level test for all idle wells using acoustical, mechanical, or other reliable methods, or other diagnostic tests approved by the Supervisor to determine whether the fluid is above the base of a USDW. The operator shall repeat testing at least once every 24 months for as long as the well is an idle well, unless the operator demonstrates that the wellbore does not penetrate a USDW, in which case fluid-level testing under this section is not required. If the operator has not demonstrated the location of the base of the USDW, then it shall be presumed that the fluid is above the base of a USDW. After April 1, 2025, the operator shall conduct testing as described in subdivision (a)(2) within 90 days of the first time that a fluid-level test indicates that the fluid level in the well is, or is presumed to be, above the base of a USDW. A well that became an idle well on or before April 1, 2019, is not required to have a fluid-level test under this section until April 1, 2021.

(2) Within 24 months of a well becoming an idle well, the operator shall conduct a casing pressure test from the surface to a depth that is 100 feet measured depth above the uppermost perforation, immediately above the casing shoe of the deepest cemented casing, or immediately above the top of the landed liner, whichever is highest. If the top of the landed liner is 100 feet or more above the cemented casing shoe, then the pressure test shall be to a depth specified by the Division on a case-by-case basis. The pressure test shall be conducted in accordance with the parameters specified in Section 1772.1.1. If for any reason a well cannot be safely and effectively tested as required, then the well shall be deemed to have failed the pressure test. For as long as the well is an idle well, the operator shall conduct subsequent testing of the well as follows:

(A) If the operator conducts a pressure test at 200 psi above surface pressure, then the operator shall repeat testing within 48 months.

(B) If the operator conducts a pressure test at 500 psi above surface pressure, then the operator shall repeat testing within 72 months.

(C) If the operator conducts a pressure test at 1,000 psi above surface pressure, then the operator shall repeat testing within 96 months.

(D) If the operator conducts testing as specified under Section 1772.1.1(b), (c), or (d), then the operator shall repeat testing within 48 months.

(3) Within eight years of a well becoming an idle well, the operator shall perform a clean out tag on the well to determine the ability to reach the current Division-approved depth of the

well using either open-ended tubing or a gauge ring demonstrated to the Division to be of the minimum diameter of the tubing necessary to properly plug and abandon the well. The operator shall attempt to reach the Division-approved depth, but shall at least reach 25 feet below the uppermost perforation in the lowermost zone not abandoned under Sections 1723 and 1723.1. The operator shall repeat this testing once every 48 months for as long as the well is an idle well, or at a lesser frequency approved by the Division on a case-by-case basis based on the successful results of previous testing and consideration of the factors described in Section 1772.4. The Division may require more frequent clean outs if known field or geologic conditions indicate risk to the mechanical integrity of the well.

(b) In addition to any other penalty or remedial requirement imposed by the Division, within 12 months of failing to successfully complete testing under subdivisions (a)(2) or (3), or otherwise failing to comply with a requirement of this section, the operator shall do one of the following:

(1) Bring the well into compliance;

(2) Partially plug and abandon the well in accordance with Section 1752;

(3) Plug and abandon the well in accordance with Public Resources Code section 3208; or

(4) Schedule the well for plugging and abandonment under an approved Idle Well Management Plan or an approved Testing Waiver Plan.

(c) Before conducting any test required under this section, the operator shall give the appropriate district office 24 hours' notice, or a shorter notice acceptable to the district office, so that a Division inspector may witness the testing. All testing shall be documented and copies of test results shall be submitted to the Division in a digital format within 60 days of the date the test is conducted, except that when fluid-level testing indicates that fluid is, or is presumed to be, above the base of a USDW test results shall be submitted within 30 days.

(d) Subject to approval by the Division, the requirements of this section and Section 1772.1.2 do not apply to an idle well if the operator has made a diligent effort to locate and access the well, and the documentation of those efforts demonstrates that it is infeasible to physically access the well.

(1) Within one year of the Division approving an operator's demonstration that a well is inaccessible, the operator shall submit a plan for the Division's review and approval to ensure that any hazards posed by the well are identified and addressed so as to prevent damage to life, health, property, and natural resources. The plan shall at a minimum address all of the following:

(A) Ongoing monitoring of the inaccessible well by such methods as periodic gas monitoring at the surface, monitoring of other wells in proximity, and groundwater monitoring;

(B) Response to any indication that the inaccessible well is discharging reservoir fluids to the surface or otherwise posing a threat;

(C) Planning and commitment to plug and abandon the well in accordance with Public Resource Code section 3208 as soon as possible should it ever become accessible; and

(D) Periodic reporting to the Division on the implementation of the plan.

(2) If the Division identifies any deficiencies in the plan submitted by the operator, then the Division will consult with the operator and identify an appropriate timeframe for correcting the deficiency.

(3) It is a violation of this subdivision if the operator fails to submit a plan under subdivision (d)(1) in a timely manner, fails to address deficiencies with the plan within the timeframe established under subdivision (d)(2), or fails to comply with the plan as approved by the Division. If the operator violates subdivision (d), then the Division will determine whether to discontinue the waiver from compliance with the other requirements of this section and Section 1772.1.2 based upon consideration of the extent of the operator's noncompliance with subdivision (d) and whether continuing the waiver will further the goal of ensuring that any hazards posed by the idle well are identified and addressed so as to prevent damage to life, health, property, and natural resources.

(e) If the operator demonstrates to the Division's satisfaction that no part of the wellbore is within one-half mile of a USDW, then for purposes of this section the well shall not be deemed an idle well until it has met the definition of "idle well" in Public Resources Code section 3008 for an additional two years.

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Sections 3106 and 3206.1, Public Resources Code.

§ 1772.1.1. Pressure Testing Parameters

(a) **Pressure Testing.** Pressure testing conducted to satisfy the requirements of Sections 1752, 1772.1, or 1772.5 shall be conducted according to the following parameters:

(1) Pressure testing shall be conducted with a liquid unless the Division approves pressure testing with gas.

(2) If pressure testing will be conducted with a liquid that contains additives other than brine, corrosion inhibitors, or biocides, then the operator shall consult with the Division regarding the contents of the liquid prior to commencing testing.

(3) The wellbore shall be filled with a stable column of fluid that is free of excess gasses.

(4) Pressure tests shall be recorded and a calibrated gauge shall be used that can record a pressure with an accuracy within one percent of the test pressure. Pressure shall be recorded at least once per minute during testing. If an analog gauge is used, then the test pressure shall be within the mid-range scale of the gauge. The pressure test results shall be submitted to the Division in digital tabular format within 60 days of the date the test is conducted. The charts or digital recording of the pressures during testing shall be provided to the Division upon request.

(5) Pressure tests shall be conducted at an initial pressure of at least 200 psi above surface pressure.

(6) A pressure test is successful if the pressure gauge does not show more than a three percent change from the initial test pressure over a continuous 30-minute period, except that if the well is within the area of review for a cyclic steam injection well or a steamflood injection well, then an increase in pressure of as much as 10 percent is a successful test.

(7) The Division may modify the testing parameters specified in this subdivision on a case-by-case basis if, in the Division's judgement, the modification is necessary to ensure an effective test of the integrity of the casing.

(b) **Inert Gas Depression Testing.** The operator may conduct an inert gas depression test to satisfy the pressure testing requirements of Sections 1752, 1772.1, or 1772.5, unless the computed necessary pressure under subdivision (b)(1) is less than 500 psi. An inert gas depression test conducted to satisfy the requirements of Sections 1752, 1772.1, or 1772.5 shall be conducted according to the following parameters:

(1) Based on measurement of the fluid level in the well and an estimation of the specific gravity of the fluid, the operator shall compute the pressure and corresponding volume of gas necessary to displace the fluid level down to a depth that is within 100 feet measured depth above the uppermost perforation, immediately above the casing shoe of the deepest cemented casing, or immediately above the top of the landed liner, whichever is highest. If the top of the landed liner is 100 feet or more above the cemented casing shoe, then the depth shall be specified by the Division on a case-by-case basis. If the computed necessary pressure is less than 500 psi, then an inert gas depression test shall not be used to satisfy the pressure testing requirements of Sections 1752, 1772.1, or 1772.5.

(2) Inert gas shall be injected into the well in a volume as computed under subdivision (b)(1), and the fluid level shall be measured again to determine if fluid has been displaced to the correct depth. Inert gas shall be added or removed as needed to displace fluid to the correct depth.

(3) The test shall be recorded and a calibrated gauge shall be used that can record a pressure with an accuracy within one percent of the testing pressure, and pressure shall be recorded at least once per minute during testing. If an analog gauge is used, then the test pressure shall be within the mid-range scale of the gauge. The test results shall be submitted to the Division in a digital tabular format within 60 days, along with all fluid-level measurements taken, the estimation of the specific gravity of the fluid in the well, and the computation of pressure necessary to displace fluid to the correct depth. The charts or digital recording of the pressures during testing shall be provided to the Division upon request.

(4) For the test to be successful, the fluid level must be static and the pressure must stabilize at the calculated pressure with a change of no more than one percent over a continuous 60-minute period. A fluid level shall be taken at the end of the test to confirm that the correct depth was maintained.

(5) The Division may modify the testing parameters specified in this subdivision on a case-by-case basis if, in the Division's judgment, the modification is necessary to ensure an effective test of the integrity of the casing.

(c) **Alternate Testing Methods.** An alternate mechanical integrity testing method may be used to satisfy the pressure testing requirements of Sections 1752, 1772.1, or 1772.5 if the alternate testing method has been approved by the Division on a case-by-case basis as being at least as effective as pressure testing to demonstrate the integrity of the well. Examples of alternate testing methods that would be considered on a case-by-case basis are a casing wall thickness inspection to estimate internal and external corrosion, employing such methods as

magnetic flux or ultrasonic technologies; or a combination of an ultrasonic imaging tool and a cement evaluation log.

(d) **Passive Testing**. If a well is a low-priority idle well, then the operator may satisfy the pressure testing requirements of Sections 1752, 1772.1, or 1772.5 by conducting a caliper survey, provided the Division has approved the testing protocols as effective for evaluating well integrity.

(e) Before conducting any testing under this section, the operator shall give the appropriate district office 24 hours' notice, or a shorter notice acceptable to the district office, so that Division staff may witness the testing.

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Sections 3106 and 3206.1, Public Resources Code.

§ 1772.1.2. Engineering Analysis for 15-Year Idle Wells

(a) By the end of the month in which an idle well has been idle for 15 years, the operator shall provide the Division with an engineering analysis demonstrating to the Division's satisfaction that it is viable to return the well to operation in the future. The engineering analysis shall document that the well could be used to access potential oil and gas reserves and that it has mechanical integrity as demonstrated by pressure testing and a clean out tag as required under Section 1772.1(a)(2) and (a)(3).

(b) The engineering analysis required under subdivision (a) shall include the following information for the purpose of demonstrating the well could be used to access potential oil and gas reserves:

(1) API number and name of the idle well.

(2) Statement of the potential future use for the idle well.

(3) Identification of each reservoir unit that might be accessed and the reservoir characteristics of each of the identified reservoir units.

(4) A representative electric log to a depth below the deepest producing zone, identifying all geologic units, formations, USDWs, freshwater aquifers, oil or gas zones, and each reservoir unit to be utilized.

(5) Structural contour map drawn on a geologic marker at or near the top of each reservoir unit to be utilized indicating faults, other lateral containment features, and areal extent of the productive zone.

(c) The engineering analysis required under subdivision (a) shall include all data specified in Section 1772.1.3, provided in the form of a graphical casing diagram or flat file data sets.

(d) The Division may require the operator to include additional data in the engineering analysis required under subdivision (a) on a case-by-case basis if the Division deems it necessary for the evaluation of whether it is viable to return the well to operation in the future.

(e) If the operator submits information to the Division under subdivision (b) that is demonstrated to be applicable to multiple wells in the same field subject to the requirements of this section, then the operator may reference the applicable information in subsequent engineering analyses and is not required to submit duplicate information.

(f) All data required under this section shall be submitted to the Division in a digital format. All maps, diagrams, and exhibits shall be clearly labeled, such as to scale and purpose, and shall clearly identify wells, boundaries, zones, contacts, and other relevant data. Unless requested by the Division, information that has already been provided to the Division is not required to be resubmitted.

(g) Where it is infeasible to supply the data specified in subdivisions (b) and (c), the Division may accept alternative data, provided that the alternative data demonstrate to the Division's satisfaction that it is viable to return the well to operation in the future.

(h) If the Division determines upon initial review of an engineering analysis required under subdivision (a) that it is not viable to return the well to operation in the future, then the Division will inform the operator of the basis of that determination and allow the operator at least 30 days to provide additional information to substantiate that the well is viable to return to operation in the future. If the Division determines upon final review of the engineering analysis and any additional information provided by the operator that it is not viable to return a well to operation in the future, then the Division will provide a notice of final determination to the operator. The operator shall either plug and abandon the well in accordance with Public Resources Code section 3208 within 12 months of receiving the notice of final determination, or schedule the well for plugging and abandonment under an approved Idle Well Management Plan or an approved Testing Waiver Plan.

(i) For wells that as of April 1, 2019, have met the definition of an idle well for nine years or more, the operator shall provide the engineering analysis described in this section to the Division by the later of the following:

(A) Within 60 days after the date pressure testing on the idle well is scheduled in the operator's Testing Compliance Work Plan under Section 1772.1.4; or

(B) By the end of the month in which the idle well has been idle for 15 years.

NOTE: Authority Cited: Sections 3013, 3106, and 3206.1. Reference: Sections 3106 and 3206.1.

§ 1772.1.3. Casing Diagrams

(a) Casing diagrams submitted under the requirements of Section 1772.1.2, subdivision (c), shall include all of the following data:

(1) Operator name, lease name, well number, and API number of the well;

(2) Date the well was spudded;

(3) Ground elevation from sea level;

(4) Reference elevation (i.e., rig floor or Kelly bushing);

(5) Base of freshwater;

(6) Base of the lowermost USDW penetrated by the well;

(7) Sizes, grades, connection type, and weights of casing;

(8) Depths of shoes, stubs, and liner tops;

(9) Depths of perforations and perforation intervals, open-hole completions, water shutoff holes, cement ports, cavity shots, cuts, type and extent of casing damage, type and extent of

junk or fish, and any other feature that influences flow in the well or may compromise the mechanical integrity of the well;

(10) Information regarding equipment such as subsurface safety valves, packers, and gas lift mandrels;

(11) Diameter and depth of hole for all drilled intervals;

(12) Identification of cement plugs inside casings, including locations of the top and bottom of cement plugs;

(13) Identification of cement fill behind casings, including locations of the top and bottom of cement fill;

(14) Type and weight (density) of fluid between cement plugs; and

(15) Depths and names of the formations, zones, and markers penetrated by the well, including the top and bottom of both the injection zone and confining layer(s) for the underground injection project(s), if applicable.

(b) Each casing diagram submitted to the Division shall be accompanied by documentation of the following:

(1) All steps of cement yield and cement calculations performed;

(2) All information used to calculate the cement slurry (volume, density, yield), including but not limited to, cement type and additives, for each cement job completed in each well; and

(3) The wellbore path, providing measured depth and both inclination and azimuth measurements.

(c) When multiple boreholes are drilled in a well, all of the information listed in this section is required for both the original hole and for any subsequent redrilled or sidetracked wellbores.

(d) Measured depth and true vertical depth shall be provided for all depths required under subdivision (a).

(e) Operators may satisfy the requirements of section 1772.1.2, subdivision (c), by submitting graphical casing diagrams or a flat file data set containing all of the information described in this section.

AUTHORITY:

Note: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3106 and 3206.1, Public Resources Code.

§ 1772.1.4. Idle Well Testing Compliance Work Plan

(a) Notwithstanding the timeframes specified in Section 1772.1(a)(2) and (a)(3), for all wells that are idle wells as of April 1, 2019, the operator shall conduct a pressure test and clean out tag as described under those subdivisions by April 1, 2025, unless the well is plugged and abandoned, partially plugged and abandoned, or scheduled for plugging and abandonment under an approved Idle Well Management Plan or Testing Waiver Plan. By June 1, 2019, the operator shall provide the Division with a Testing Compliance Work Plan that schedules completion of this testing over the six-year period in accordance with the requirements of this section.

(b) The operator's Testing Compliance Work Plan shall schedule a pressure test and a clean out tag, as described in Section 1772.1(a)(2) and (a)(3), for each well that is an idle well

as of April 1, 2019, but the Testing Compliance Work Plan shall exclude any well scheduled for plugging and abandonment under an approved Idle Well Management Plan or Testing Waiver Plan. The Testing Compliance Work Plan shall include the following required annual benchmarks:

(1) Testing shall be completed on at least 5 percent of all of the wells covered by the Testing Compliance Work Plan by April 1, 2020.

(2) Testing shall be completed on at least 15 percent of all of the wells covered by the Testing Compliance Work Plan by April 1, 2021.

(3) Testing shall be completed on at least 30 percent of all of the wells covered by the Testing Compliance Work Plan by April 1, 2022.

(4) Testing shall be completed on at least 50 percent of all of the wells covered by the Testing Compliance Work Plan by April 1, 2023.

(5) Testing shall be completed on at least 75 percent of all of the wells covered by the Testing Compliance Work Plan by April 1, 2024.

(6) Testing shall be completed on all of the wells covered by the Testing Compliance Work Plan by April 1, 2025.

(7) At least one well shall be scheduled for testing in each year until initial testing is completed on all wells covered by the Testing Compliance Work Plan.

(c) The operator shall prioritize the testing of wells based on the considerations listed in Section 1772.4, and the operator's Testing Compliance Work Plan shall include notes indicating the basis for prioritizing wells. The Division will review the Testing Compliance Work Plan upon submission and periodically after that, and the Division may adjust the order of wells to be tested based on the considerations listed in Section 1772.4.

(d) If, subsequent to submission of the Testing Compliance Work Plan, wells that were idle wells as of April 1, 2019, are transferred from one operator to another or scheduled for plugging and abandonment under an approved Idle Well Management Plan or Testing Waiver Plan, then the operator shall submit a revised Testing Compliance Work Plan to the Division within 90 days.

(e) For purposes of determining whether the operator has complied with the annual benchmarks specified in subdivision (b), proper plugging and abandonment or partial plugging and abandonment of a well amounts to completion of testing. Testing conducted prior to April 1, 2019, will be accepted for compliance with this section, provided that the test was conducted in accordance with the parameters specified in Sections 1772.1 and 1772.1.1. If a well has been an idle well for less than two years as of April 1, 2019, then completion of the clean out tag is not required until eight years from the date the well became an idle well, and a clean out tag is not required for completion of testing under the Testing Compliance Work Plan.

(f) If the operator does not complete testing on the number of wells required under subdivision (b), then each well that the operator failed to test constitutes a separate violation and is subject to the requirements of Section 1772.1(b).

(g) Once testing is completed for an idle well covered by the Testing Compliance Work Plan, subsequent testing of the idle well shall be conducted in accordance with the timeframes for

repeat testing specified in Section 1772.1(a)(2) and (a)(3). Wells that become idle wells after April 1, 2019, shall be tested in accordance with the timeframes specified in Section 1772.1.
NOTE: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3106 and 3206.1, Public Resources Code.

§ 1772.2. Idle Well Testing Waiver Plan

(a) A Testing Waiver Plan is a schedule for plugging and abandonment of idle wells that extends up to but not more than eight years into the future. If an idle well is scheduled to be plugged and abandoned as part of a Testing Waiver Plan that has been approved by the Division, and the operator is in compliance with the plan, then the operator is not required to meet the requirements of Sections 1772.1, 1772.1.1, or 1772.1.2 for that well.

(b) A Testing Waiver Plan is subject to approval by the Division, and shall meet the following requirements:

(1) The plan shall include a list of idle wells to be plugged and abandoned under the plan, and the following information for each of the wells listed:

(A) The API number and name of the well;

(B) The date by which the well is scheduled to be plugged and abandoned; and

(C) Any known wellbore integrity deficiencies in the well, including an explanation of the deficiency, when it became known, and a description of any prior attempts to remediate or abandon the wellbore.

(2) In each year of the plan, at least 10 percent of the idle wells covered by the plan shall be scheduled to be plugged and abandoned, and all idle wells covered by the plan shall be scheduled to be plugged and abandoned within eight years.

(3) The operator shall prioritize the plugging and abandonment of wells based on the considerations listed in Section 1772.4, and the operator's Testing Waiver Plan shall include notes indicating the basis for prioritizing wells. In the course of reviewing a Testing Waiver Plan for approval or during subsequent review, the Division may adjust the order of wells to be plugged and abandoned based on the considerations listed in Section 1772.4.

(c) Subject to Division review and approval, the operator may request to modify the idle wells listed in an approved Testing Waiver Plan. A request to modify the list of idle wells shall be supported by justification for the change, information required under subdivision (b)(1) for any idle wells added to the list, and a work plan for expeditiously bringing any wells removed from the list into compliance with the requirements of Sections 1772.1, 1772.1.1, and 1772.1.2. After each year of adherence to a Testing Waiver Plan, the operator may add additional wells to an additional year of the plan, provided that the addition complies with the requirements of subdivision (b).

(d) If an operator fails to complete plugging and abandonment of any well according to the schedule approved by the Division, then the Division may cancel the Testing Waiver Plan. If the Division cancels the Testing Waiver Plan, then the exemptions under subdivision (a) no longer apply for any of the wells listed in the plan and the operator shall conduct the testing and analysis required under Sections 1772.1, 1772.1.1, and 1772.1.2 for each of the listed wells within 90 days. If the Division has canceled a Testing Waiver Plan, then the Division will not

consider a new Testing Waiver Plan for approval unless the operator is in compliance with all of the requirements of Sections 1772.1, 1772.1.1, and 1772.1.2.

(e) For the purposes of this section, “plugging and abandonment” means plugging and abandonment in accordance with Public Resources Code section 3208 or partial plugging and abandonment in accordance with Section 1752.

NOTE: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3106 and 3206.1, Public Resources Code.

§ 1772.3. Idle Well Management Plan

(a) If an idle well is scheduled to be plugged and abandoned as part of an Idle Well Management Plan approved by the Division under Public Resources Code section 3206, subdivision (a)(2), and the operator is in compliance with the plan, then the operator is not required to meet the requirements of Sections 1772.1, 1772.1.1, or 1772.1.2 for that well.

(b) An Idle Well Management Plan under Public Resources Code section 3206, subdivision (a)(2), shall specify whether the long-term wells scheduled to be eliminated will be plugged and abandoned or returned to use.

(c) Operators implementing an Idle Well Management Plan filed under Public Resources Code section 3206, subdivision (a)(2), shall prioritize the elimination of long-term idle wells based on the considerations listed in Section 1772.4, and the operator’s Idle Well Management Plan shall include notes indicating the basis for prioritizing wells. In the course of reviewing an Idle Well Management Plan for approval or during subsequent review, the Division may adjust the order of long-term idle wells to be eliminated based on the considerations listed in Section 1772.4.

NOTE: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3106, 3206 and 3206.1, Public Resources Code.

§ 1772.4. Prioritization of Idle Wells for Testing and Plugging and Abandonment

(a) When proposing a Testing Compliance Work Plan under Section 1772.1.4, a Testing Waiver Plan under Section 1772.2, or an Idle Well Management Plan under Public Resources Code section 3206, subdivision (a)(2), the operator shall consider all of the following when prioritizing idle wells for testing or plugging and abandonment:

(1) Whether the idle well is a critical well, in an urban area, or has an environmentally sensitive wellhead;

(2) Whether the idle well is located in an area of known geologic hazard, such as subsidence, landslides, or a history of damage to wells in the area from seismicity;

(3) Whether the idle well has pressure in the casing or tubing at the surface, and whether the well is open to the atmosphere;

(4) Whether the idle well has surface obstacles or other impediments preventing access to the wellhead, including but not limited to buildings or structures, surface-use activities, irrigation systems, roads, terrain, or restricted access;

(5) Whether the idle well has known downhole issues that would make it difficult to either reactivate the well or plug and abandon the well, such as known holes in casing, collapsed casing, stuck rods, packer, or fish;

(6) Whether the fluid level in the idle well is above the base of freshwater;

(7) Whether the fluid level in the idle well is above the base of a USDW;

(8) The age of the idle well;

(9) Any other indications that the idle well potentially poses a threat to life, health, property, or natural resources; and

(10) Operational or economic efficiencies that may be achieved by ordering work in a particular manner.

(b) In evaluating an operator's proposed Idle Well Management Plan, Testing Waiver Plan, or Testing Compliance Work Plan for approval, or in a subsequent review of a plan by the Division, the Division may adjust the order of idle wells to be tested or plugged and abandoned based on the considerations listed in subdivision (a).

NOTE: Authority cited: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3106, 3206 and 3206.1, Public Resources Code.

§ 1772.5. Requirements for Active Observation Wells

(a) Within 6 months of a well becoming an active observation well, the operator shall conduct a casing pressure test in accordance with the parameters specified in Section 1772.1.1, unless such testing has been conducted on the well in the past five years. The casing shall be tested from the surface to a depth that is 100 feet measured feet above the uppermost perforation, immediately above the casing shoe of the deepest cemented casing, or immediately above the top of the landed liner, whichever is highest. If the top of the landed liner is 100 feet or more above the cemented casing shoe, then the pressure test shall be to a depth specified by the Division on a case-by-case basis. The operator shall repeat this testing at least once every 60 months while the well is an observation well.

(b) In addition to any other penalty or remedial requirement imposed by the Division, within 12 months of failing to successfully complete testing under this section the operator shall do one of the following:

(1) Bring the well into compliance;

(2) Partially plug and abandon the well in accordance with Section 1752;

(3) Plug and abandon the well in accordance with Public Resources Code section 3208; or

(4) Schedule the well for plugging and abandonment under an approved Idle Well Management Plan or an approved Testing Waiver Plan.

(c) For wells approved as active observation wells as of April 1, 2019, the operator shall conduct initial testing as described under this section on at least half of them by April 1, 2021, and conduct such testing on all of them by April 1, 2023.

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Sections 3008, 3106, 3224, and 3237 Public Resources Code.

§ 1772.6. Verification of Production or Injection

For any well for which injection or production has been reported under Public Resources Code section 3227 or 3406, upon request by the Division, the operator shall demonstrate that the well is capable of producing or injecting and did in fact produce or inject as reported. In order to make this demonstration, the Division may require an equipment check, well test, or verifying documentation including, but not limited to:

(a) Operability of the production or injection equipment;

(b) Filling of production tanks;

(c) Field production reports;

(d) Lease oil inventory at the beginning or end of the month;

(e) Run tickets or automated shipping data, which includes the shipping and/or purchasing company and the volume received;

(f) Lab data, such as gravity, water cut, and/or temperature;

(g) Details of the methods used to allocate production to wells; or

(h) Any other documentation or means by which the Division may reasonably require an operator to verify production.

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Sections 3008, 3106, 3227 and 3406, Public Resources Code.

§ 1772.7. Idle Wells Penetrating a Gas Storage Reservoir

(a) If an idle well is subject to the mechanical integrity testing requirements of Section 1726.6, then the operator is not required to meet the requirements of Sections 1772.1, 1772.1.1, 1772.1.2, or 1772.5 for that well.

NOTE: Authority cited: Sections 3013, 3106 and 3180, Public Resources Code. Reference: Sections 3106, 3180, 3181, 3206.1 and 3403.5, Public Resources Code.

§ 1773. Production Facilities Containment, Maintenance, and Testing.

Production facilities shall adhere to the containment, construction, maintenance, inspection, testing, decommissioning, reactivation, and reporting requirements outlined in Sections 1773.1 through 1773.5.

Authority: Sections 3013 and 3270, Public Resources Code. Reference: Sections 3106 and 3270, Public Resources Code.

§ 1773.1. Production Facility Secondary Containment.

(a) All production facilities storing and/or processing fluids, except valves, headers, manifolds, pumps, compressors, wellheads, pipelines, flowlines and gathering lines shall have secondary containment.

(b) Secondary containment shall be capable of containing the equivalent volume of liquids from the single piece of equipment with the largest gross capacity within the secondary containment.

(c) Secondary containment shall be capable of confining liquid for a minimum of 72 hours.

(d) When not in use for rain water management, rain water valves on a secondary containment shall be closed and secured to prevent unauthorized use.

(e) All damage to secondary containment shall be repaired immediately.

(f) The requirements of this section are not applicable until six months after the effective date of this regulation.

Authority: Sections 3013 and 3270, Public Resources Code. Reference: Sections 3106 and 3270, Public Resources Code.

§ 1773.2. Tank Construction and Leak Detection.

(a) All new tanks shall be constructed and designed to provide enough space between tanks to allow safe access for maintenance, inspection, testing, and repair.

(b) Foundations for new tanks shall be designed to support the tank, maintain the tank level, and drain fluid away from the tank, including fluids that may leak from the tank. The sub-base of the foundation shall include an impermeable barrier designed to prevent downward fluid migration and to allow leaks to drain away from the tank and be detected by visual inspection or through the use of a leak detection sensor, as each particular instance may require. The foundation base shall be made of material that provides for support and drainage away from the tank.

(c) When a tank bottom is replaced, a leak detection system shall be installed and properly maintained that will either:

(1) Channel any leak beneath the tank to a location where it can be readily observed from the outside perimeter of the tank, or

(2) Accurately detect any tank bottom leak through the use of sensors.

(d) The Supervisor or district deputy may require a tank bottom leak detection system for any tank with a foundation that does not have an impermeable barrier after considering such factors as the age of the tank, fluid service, and proximity to groundwater.

Authority: Sections 3013 and 3270, Public Resources Code. Reference: Sections 3106, 3224 and 3270, Public Resources Code.

§ 1773.3. Tank Maintenance and Inspections.

(a) All tanks shall be properly identified with the operator's tank identification number, tank type (production, stock, water, etc.), and with appropriate materials hazard placards or labels.

(b) Operators shall inspect in-service tanks at least once a month for the following:

(1) Leakage at the base, seams, associated piping, tank shell plugs, or any other fitting that could leak.

(2) The presence of corrosion or shell distortions.

(3) The general condition of the foundation, including any signs of settling or erosion that may undermine the foundation.

(4) The condition of paint coatings, insulation systems and tank grounding system components, if present.

(c) Leaking tanks shall be reported to the appropriate Division district office within 48 hours and shall be taken out of service and designated as an Out-of-Service tank.

(d) Wooden plugs or screw-in plugs shall not be used for permanent repair.
Authority: Sections 3013 and 3270, Public Resources Code. Reference: Sections 3106, 3224 and 3270, Public Resources Code.

§ 1773.4. Tank Testing and Minimum Wall Thickness Requirements.

(a) Tank wall thickness testing shall be conducted on in-service tanks at intervals not to exceed the following:

(1) If the corrosion rate of the tank is not known, at least once every five years.

(2) If the corrosion rate of the tank is known, an interval determined from corrosion rate calculations approved by the Supervisor, but not to exceed once every 15 years.

(3) Tank wall thickness testing shall be conducted within two years of the effective date of this regulation for tanks that have not had testing within the required interval.

(b) Insulated tanks shall have insulation removed to the extent necessary to determine the thickness of the tank walls or roof.

(c) The minimum thickness for a tank shell shall be 0.06 inch.

(d) In-service tanks shall be internally inspected and tested to determine bottom plate thickness no less than once every 20 years. In-service tanks that have not been internally inspected within the 20 years preceding the effective date of this section must be internally inspected within two years after the effective date of this section. A tank is exempt from this requirement if:

(1) The tank is not an environmentally sensitive tank, it is not in an urban area, and it is not located above subsurface freshwater; or

(2) The tank has a foundation that is designed and constructed in accordance with the requirements of Section 1773.2(b); or

(3) The tank has a properly installed, operating and maintained leak detection system as specified in Section 1773.2(c).

(e) The minimum bottom plate thickness shall meet the following criteria:

(1) 0.10 inch for tank bottom/foundation design with no means of detection and containment of a bottom leak;

(2) 0.05 inch for tank bottom/foundation design with adequate leak detection and containment of a bottom leak;

(3) 0.05 inch in conjunction with a reinforced tank bottom lining, greater than 0.05 inch thick.

(f) The Supervisor or district deputy may require that a tank that has had a leak resulting in the release of a reportable quantity be tested to verify integrity prior to being put back into service.

(g) A tank that is not repaired within 60 days of failing an inspection or test required by this section shall be taken out of service and designated as an Out-of-Service tank. The Supervisor or district deputy may grant one extension of up to 120 days if the operator shows to the satisfaction of the Supervisor or district deputy that there is no significant threat as a result of the extension.

(h) Tanks that are not susceptible to corrosion, such as non-metal tanks and tanks with liners, are not subject to the requirement of this section but shall be inspected and tested according to the manufacturer's specifications or as requested by the Supervisor or district deputy.

(i) An operator may petition the Supervisor to allow a minimum tank wall or tanks bottom thicknesses that is lower than what is required in subdivisions (c) and (e) of this section. The Supervisor may grant such a petition if he or she is satisfied that based on the design and use of the tank a lower minimum thickness will ensure that the tank will operate as designed and will be capable of safely containing fluid.

Authority: Sections 3013 and 3270, Public Resources Code. Reference: Sections 3106 and 3270, Public Resources Code.

§ 1773.5. Out-of-Service Production Facility Requirements.

(a) Within six months after the determination that a production facility is Out-of-Service, the following shall be required:

(1) Out-of-Service production facilities shall have fluids, sludge, hydrocarbons, and solids removed and shall be disconnected from any pipelines and other in-service equipment.

(2) Out-of-Service production facilities shall be properly degassed in accordance with local air district requirements.

(3) Clean-out doors or hatches on Out-of-Service tanks shall be removed and a heavy gauge steel mesh grating (less than 1”spacing) shall be secured over the opening to allow for visual inspection and prevent unauthorized access.

(4) Out-of-Service tanks and vessels shall be labeled with Out-of-Service or OOS. “Out-of-Service” or “OOS” shall be painted in bold letters at least one foot high, if possible, on the side of the tank or vessel at least five feet from the ground surface, or as high as possible, along with the date it was taken out of service.

(5) Out-of-Service production facilities shall have valves and fittings removed or secured to prevent unauthorized use.

(6) Pipelines associated with Out-of-Service tanks and pressure vessels shall be removed or flushed, filled with an inert fluid, and blinded.

(b) Out-of-Service production facilities shall not be reactivated unless all needed repairs have been completed and the production facility is in compliance with all applicable testing and inspection requirements.

Authority: Sections 3013 and 3270, Public Resources Code. Reference: Sections 3106 and 3270, Public Resources Code.

§ 1774. Pipeline Construction and Maintenance.

Newly installed pipelines shall be designed, constructed, and all pipelines shall be tested, operated, and maintained in accordance with good oil field practice and applicable standards in California Code of Regulations, title 8, section 6533, or other methods approved by the Supervisor. The Supervisor may require design or construction modifications, and/or additional

testing and maintenance if he or she determines that good oil field practices and applicable standards have not been used.

Good oilfield practice includes, but is not limited to:

(a) Utilization of preventative methods such as cathodic protection and corrosion inhibitors, as appropriate, to minimize external and internal corrosion.

(b) Utilization of pipeline coating or external wrapping for new or replaced buried or partially buried pipelines to minimize external corrosion. The coating or external wrapping should have a high electrical resistance, be an effective moisture barrier, have good adhesion to the pipe, and be able to resist damage during handling.

(c) Employment, where practical, of equipment such as low-pressure alarms and safety shut-down devices to minimize spill volume in the event of a leak.

(d) If feasible, locating above ground, preferably on supports or racks, any new pipelines or parts of a pipeline system that are being relocated or replaced.

Authority: Sections 3013 and 3270, Public Resources Code. Reference: Sections 3106, 3224 3270 and 3270.5, Public Resources Code.

§ 1774.1. Pipeline Inspection and Testing.

(a) Operators shall visually inspect all aboveground pipelines for leaks and corrosion at least once a year.

(b) Operators shall inspect all active gas pipelines in sensitive areas that are 10 or more years old for leaks or other defects at least once a year, or at a frequency approved by the Supervisor and listed in the operator's Pipeline Management Plan. The operator shall conduct the inspection in accordance with applicable regulatory standards or, in the absence thereof, an accepted industry standard that is specified by the operator and listed in the Pipeline Management Plan.

(c) The Supervisor may order such tests or inspections deemed necessary to establish the reliability of any pipeline system. Repair, replacement, or cathodic protection may be required.

(d) Operators shall conduct pressure testing in accordance with subdivision (f)(2) on any pipeline that has had a leak resulting in the release of a fluid in a quantity that triggers reporting of the release under any regulatory, statutory, or other legal requirement. The pipeline shall not be returned to service unless the pressure testing has been successfully completed. Test results shall be provided to the Division for review within seven days following the test.

(e) Pipe clamps, wooden plugs or screw-in plugs shall not be used for permanent repair of pipeline leaks.

(f) The operator shall perform periodic mechanical integrity testing on all active environmentally sensitive pipelines that are gathering lines, and all urban pipelines over 4″ in diameter, and all active gas pipelines in sensitive areas. The mechanical integrity testing shall be conducted every two years, or at an alternative frequency approved by the Supervisor based on demonstrated wall thickness and remaining service life over a period of at least two years. The testing frequencies shall be specified in the operator's Pipeline Management Plan. Pipelines less than 10 years old are exempt from the testing requirements of this subdivision. Subject to review and approval by the Division, the operator shall identify effective mechanical

integrity testing methods based on pipeline type and use. The mechanical integrity testing methodology for compliance with this subdivision shall be specified in the operator's Pipeline Management Plan and shall include at least one of the following:

(1) Nondestructive testing using ultrasonic or other techniques approved by the Supervisor, to determine wall thickness;

(2) Pressure testing using:

(A) The guidelines recommended by industry standards, such as the American Petroleum Institute, American Society of Mechanical Engineers for oil or gas pipelines; or

(B) The method approved by the State Fire Marshal, Pipeline Safety Division for liquid pipelines or US Department of Transportation, Pipeline and Hazardous Materials Safety Administration for gas pipelines.

(3) Internal inspection devices such as a smart pig, as approved by the Supervisor; or

(4) Any other method approved by the Supervisor that ensures mechanical integrity so as to protect life, health, property, and natural resources.

Copies of mechanical integrity test results shall be maintained in a local office of the operator for ten years and made available to the Division, upon request. The operator shall assess all test results to determine continued safe operations and that risks identified in the Pipeline Management Plan are adequately addressed. The operator shall repair and retest or remove from service any pipeline that fails the mechanical integrity test. The operator shall promptly notify the Division in writing of any pipeline taken out of service due to a test failure.

(g) Vapor recovery pipelines are exempt from mechanical integrity testing under subdivision (f) if they are equipped with safeguards, such as oxygen detectors and are leak tested at least annually. The operator shall document the safeguards and inspection regime in its Pipeline Management Plan.

(h) A county board of Supervisors, a city council, or another state agency may petition the Supervisor to include other pipelines within their jurisdiction as environmentally sensitive or within a sensitive area. The request must be in writing and based on findings of a competent, professional evaluation that shows there is a probability of significant public danger or environmental damage if a leak were to occur.

(1) Within 30 days of receipt of a petition, the Supervisor shall notify any affected operator.

(2) Within 60 days of notification to the operators, the Supervisor shall schedule a hearing with the petitioner and operators to allow all parties to be heard.

(3) Within 30 days after the conclusion of the hearing, the Supervisor shall make a determination as to whether the areas or pipelines should be considered environmentally sensitive.

(i) For pipelines that are subject to mechanical integrity testing under subdivision (f), but that were not subject to mechanical integrity testing under subdivision (f) prior to January 1, 2018, mechanical integrity testing is not required to be completed until January 2, 2020. For these pipelines, mechanical integrity testing shall be scheduled, completed, and mechanical integrity test results documented per subdivision (f) prior to January 2, 2020.

Authority: Sections 3013 and 3270, Public Resources Code. Reference: Sections 3106, 3270, and 3270.5, Public Resources Code.

§ 1774.2. Pipeline Management Plans.

(a) Operators shall prepare a pipeline management plan for all pipelines, and current operators as of October 1, 2018, shall submit a copy of the plan to the Supervisor no later than October 1, 2019. The operator shall maintain an up-to-date copy and provide it to the Supervisor upon request. The plan shall be updated within 90 days whenever pipelines are acquired, installed, altered, or at the request of the Supervisor. Pipelines that have been abandoned to the standards specified in Section 1776(f) are exempt from this requirement.

(b) The pipeline management plan shall include the following:

(1) A listing of information on each pipeline including, but not limited to: pipeline type, grade, actual or estimated installation date of pipeline, design and operating pressures, and any available leak, repair, inspection and testing history.

(2) A description of the testing method and schedule for all pipelines.

(3) A description of preventative maintenance performed for associated appurtenances, instrumentation, and equipment (e.g. valves, actuators, gauges, sensors, etc.) to ensure safe pipeline operations.

(4) A list and maps of all pipelines that indicate which lines pass through sensitive areas, environmentally sensitive areas, urban areas, and designated waterways. The operator shall clearly indicate where information has been provided about pipelines that are not subject to regulation by the Division.

(5) A description of the product transferred in each pipeline.

(c) The Supervisor may establish additional requirements or modifications to a pipeline management plan, based on individual circumstances, to ensure life, health, property, and natural resources are protected adequately.

(d) A plan pursuant to California Code of Regulations Title 8, Section 6533 may fulfill the requirements of this section if the plan is determined to be adequate by the appropriate Division district deputy.

Authority: Sections 3013 and 3270, Public Resources Code. Reference: Sections 3106, 3270, and 3270.5, Public Resources Code.

§ 1775. Oilfield Wastes and Refuse.

(a) Oilfield wastes, including but not limited to oil, water, chemicals, mud, and cement, shall be disposed of in such a manner as not to cause damage to life, health, property, freshwater aquifers or surface waters, or natural resources, or be a menace to public safety. Disposal sites for oilfield wastes shall also conform to State Water Resources Control Board and appropriate California Regional Water Quality Control Board regulations.

(b) Dumping harmful chemicals where subsequent meteoric waters might wash significant quantities into freshwaters shall be prohibited. Drilling mud shall not be permanently disposed of into open pits. Cement slurry or dry cement shall not be disposed of on the surface.

(c) Unused equipment and scrap attendant to oilfield operations shall be removed from a production or injection operations area and/or stored in such a manner as to not cause damage to life, health, or property, or become a public nuisance or a menace to public safety. Trash and other waste materials attendant to oilfield operations shall be removed and disposed of properly.
Authority: Section 3013, Public Resources Code. Reference: Section 3106, Public Resources Code.

§ 1776. Well Site and Lease Restoration.

(a) In conjunction with well plugging and abandonment operations, any auxiliary holes, such as rat holes, shall be filled with earth and compacted properly; all construction materials, cellars, production pads, and piers shall be removed and the resulting excavations filled with earth and compacted properly to prevent settling; well locations shall be graded and cleared of equipment, trash, or other waste materials, and returned to as near a natural state as practicable. Well site restoration must be completed within 60 days following plugging and abandonment of the well.

(b) Sumps shall be closed in accordance with Regional Water Quality Control Board and Department of Toxic Substances Control requirements.

(c) Unstable slope conditions created during site preparation shall be mitigated in such a manner as to prevent slope collapse.

(d) Access roads to well locations generally will not be covered by these regulations; however, any condition that creates a hazard to public safety or property or causes interference with natural drainage will not be acceptable.

(e) Prior to the plugging and abandonment of the last well or group of wells on a lease, the operator shall submit a plan and schedule for completing lease restoration. The lease-restoration plan shall also include the locations of any existing or previously removed, where known, sumps, tanks, pipelines, and facility settings. Lease restoration must begin within three (3) months and be completed within one year after the plugging and abandonment of the last well(s) on the lease. However, the Supervisor may require or approve a different deadline for lease restoration.

(f) Lease restoration shall include the removal of all tanks, above-ground pipelines, debris, and other facilities and equipment. Remaining buried pipelines shall be purged of oil and filled with an inert fluid. Toxic or hazardous materials shall be removed and disposed of in accordance with Department of Toxic Substances Control requirements.

(g) Upon written request of the operator or property owner, exceptions to this section may be made provided the condition does not create a public nuisance or a hazard to public safety. Exceptions may also be granted by the Supervisor when these requirements conflict with local or federal regulations. If a written request for an exception is received from the operator, consent to the exception from the property owner may be required before it is approved by the Supervisor.
Authority: Section 3013, Public Resources Code. Reference: Sections 3106 and 3208, Public Resources Code.

§ 1777. Maintenance and Monitoring of Production Facilities, Safety Systems, and Equipment.

(a) Operators shall maintain production facilities in good condition and in a manner to prevent leakage or corrosion and to safeguard life, health, property, and natural resources.

(b) Operators shall establish and comply with a written preventative maintenance program plan for prevention of corrosion and leakage and shall maintain documentation of steps taken to follow the plan. Such a preventative maintenance plan shall include, but not be limited to, the following factors:

(1) The level of usage and wear to which the production facilities are exposed.

(2) The age of the production facilities.

(3) Climate conditions where the production facilities are located.

(4) Industry standards for maintenance and corrosion prevention.

(5) Maintenance recommendations or guidelines from the manufacturers of the production facilities.

(c) Maintenance of production facilities shall include, but not be limited to the following:

(1) Operators shall conduct external visual inspections at least once a month of aboveground production facilities, excluding pipelines, for leaks and corrosion. Facilities that are not operating properly or are leaking shall be repaired or replaced.

(2) Weeds and debris shall be removed from secondary containment areas or catch basins, and the integrity of all berms shall be inspected monthly. Fluids, including rainwater, shall be removed.

(3) Well cellars shall be covered and kept drained. Grating or flooring shall be installed and maintained in good condition so as to exclude people and animals. Cellars should be protected from as much runoff water as practical.

(4) Injection lines shall be disconnected from injection wells unless there is current approval from the Division for injection of fluid.

(d) All equipment and facilities in urban areas shall be enclosed individually or with perimeter fencing in accordance with Section 1778(a) or Section 1778(e) where it is necessary to protect life and property. Enclosures in nonurban areas shall be constructed in accordance with Section 1778(a) or Section 1778(b) where necessary to protect life and property.

(e) The Supervisor may order the operator to inspect and test safety systems and equipment associated with consolidated production facilities. The frequency of the inspection and testing may be based on the manufacturer's recommendation.

(f) Vehicle access routes to all production facilities must be maintained in a safe and passable condition.

Authority: Sections 3013 and 3270, Public Resources Code. Reference: Sections 3106, 3224 and 3270, Public Resources Code.

§ 1777.1. Production Facility Inspection Frequency.

(a) The Supervisor may order an operator to conduct inspections required under Sections 1773.3(b), 1774.1(a) or 1777(c)(1) more frequently if the operator:

(1) Has failed to comply with an order of the Supervisor;

(2) Has a history of leakage or spills at a specific well or production facility; or

(3) Has a history of noncompliance with Public Resources Code, Division 3, Chapter 1 and the regulations promulgated thereunder.

(b) Every two years after the effective date of an order issued under this section, the Supervisor shall review the operator's history of compliance, leaks and spills to determine whether the order should be rescinded.

Authority: Sections 3013 and 3270, Public Resources Code. Reference: Sections 3106, 3224 and 3270, Public Resources Code.

§ 1777.2. Production Facility Reporting Requirements.

(a) Any operator acquiring the right to operate a facility shall notify the local district office in writing within 30 days after finalizing the sale or transfer with the following information:

(1) The facility location;

(2) A unique alphanumeric tank identification number designated by the operator consisting of 10 characters or less;

(3) The date the transaction became effective; and

(4) The facility lease name.

(b) Operators shall notify the local district office within 60 days after completing new construction, alteration, or decommissioning of a production facility, or reactivating an Out-of-Service tank. This notification report shall describe the activities and reference the production facilities that have been added, altered or decommissioned.

(c) Operators shall notify the local district office two days or more prior to conducting required tank or pipeline testing specified in Sections 1773.4 or 1774.1.

Authority: Sections 3013 and 3270, Public Resources Code. Reference: Sections 3106, 3202 and 3270, Public Resources Code.

§ 1777.3. Production Facility Documentation Retention Requirements.

(a) Operators shall maintain records of construction, installation, maintenance and repair operations, tests, and inspections and shall retain the documentation as follows:

(1) For construction, installation and major repairs, documentation shall be retained for the life of the production facility.

(2) For routine maintenance and minor repairs, documentation shall be retained for five years.

(3) For required inspections and tests, documentation shall be retained for five years or for the last two times that the inspection or test has been performed, whichever is longer.

(b) Documentation shall include, but is not limited to:

(1) Name, type, and location of the production facility;

(2) Description of the construction, repair, maintenance, test, or inspection performed;

(3) Date(s) of the activity;

(4) Personnel that performed the construction, repair, maintenance, test, or inspection and their qualifications.

(c) Documentation shall be available for review by the Supervisor or his or her representative and maintained at the operator's local office at all times during regular business hours. If the operator does not have a local office, copies of the documentation shall be sent to the local Division district office upon request.

Authority: Sections 3013 and 3270, Public Resources Code. Reference: Sections 3106, and 3270, Public Resources Code.

§ 1777.4. Well Maintenance and Cleanout History.

(a) Unless already addressed by an approved aggregation plan under subdivision (d), within 60 days of completing an operation on a well that involves emplacing fluid containing acid in the well, the operator shall submit the following information to the Division for inclusion in the well history:

(1) A description of the nature and purpose of the operation;

(2) The volume of fluid emplaced in the well in the course of the operation, including specification of the gallons per treated foot; and

(3) Calculation of the Acid Volume Threshold for the operation.

(b) Within 60 days of completing an operation on a well that involves application of pressure to the formation that exceeds formation pore pressure, the operator shall submit the following information with the Division for inclusion in the well history:

(1) A description of the nature and purpose of the operation; and

(2) The bottom-hole pressure applied to the formation; and

(3) Calculations used to determine bottom-hole pressure, if any.

(c) This section does not apply to the following operations:

(1) Well stimulation treatments regulated under Article 4 of this subchapter;

(2) Underground injection project operations regulated under Sections 1724.6 through 1724.10 or Sections 1748 through 1748.3;

(3) Drilling, redrilling, reworking, plugging, or abandonment operations permitted under Public Resources Code section 3203 or 3229; and

(4) Replacement of equipment in the well, including but not limited to packers, pumps, and tubing.

(d) Subject to approval by the Division, an operator may propose a plan for submitting aggregated information regarding a specific type of repeated operation that involves emplacing fluid containing acid in the well yet clearly does not meet the definition of a well stimulation treatment. An aggregation plan shall provide for annual submission of the aggregated volume of fluid containing acid used in an oilfield for the type of operation, a list of the wells subject to the operation during the year, and, if the operation is performed multiple times on the same well, the number of time the operation was performed on each well. An aggregation plan may be terminated at the Division's sole discretion.

(e) The Division will maintain a searchable index of submissions made under this section, and the index will be made available on the Division's public internet website. The searchable index will clearly indicate each submission for a treatment that exceeds the formation fracture gradient or emplaces acid in the well and exceeds the Acid Volume Threshold, and such

submissions shall include the Division's determination that the treatment is not a well stimulation treatment and the basis for the determination.
Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106, 3160 and 3213, Public Resources Code.

§ 1778. Enclosure Specifications.

(a) Chain link fences. All chain link fences shall be constructed to meet the following specifications:

(1) Fences shall be not less than 5 feet high and mounted on 1 1/4” diameter steel posts with at least three strands of barbed wire mounted at a 45-degree angle from the top of the fence.

(2) The fence shall be constructed of chain link or other industrial-type fencing of not less than 11-gauge wire and of not greater than 2-inch nominal mesh.

(3) Supporting posts shall be securely anchored to the surface, spaced no more than 14 feet apart. Provisions for removable posts may be approved provided that the anchoring device is an integral part of the fence.

(4) Tension wires of at least No. 9 gauge coil spring wire, or equivalent, shall be stretched at the top and bottom of the fence fabric and shall be fastened to the fabric at 24-inch intervals. There shall be no aperture below the fence large enough to permit any child to crawl under.

(b) Wire fences. All wire fences shall be constructed to meet the following specifications:

(1) There shall be either: (1) four strands of barbed wire spaced 12 inches between strands and maintained with sufficient tension to preclude sagging; or (2) commercial livestock wire netting with a minimum height of 4 feet and sufficient tension.

(2) Posts may be of any material of sufficient strength and rigidity to support the wire and restrain people or livestock from pushing them over. Posts shall be set no more than 10 feet apart and buried at least 12 inches into the ground.

(c) Gates. Gates shall be of a structure substantially the same as the required fences and shall be kept secured when not attended by an adult.

(d) Screening. All screening to cover sumps shall meet the following specifications:

(1) Be not greater than 2-inch nominal mesh.

(2) Be of sufficient strength to restrain entry of wildlife.

(3) Be supported in such a manner so as to prevent contact with the sump fluid.

(e) Other Types of Materials. Any material that can be used effectively to restrict access may be substituted for the materials indicated in (a), (b), (c), and (d), if approved by the Supervisor.
Authority: Sections 3013, 3106 and 3782, Public Resources Code. Reference: Sections 3106 and 3781, Public Resources Code.

§ 1779. Special Requirements.

The Supervisor in individual cases may set forth other requirements where justified or called for.
Authority: Sections 3013 and 3106, Public Resources Code. Reference: Sections 3106, 3226 and 3787, Public Resources Code.

§ 1779.1. Deadlines for Obtaining Aquifer Exemption.

(a) An underground injection project approved by the Division for injection into an aquifer that has not received an aquifer exemption is subject to the following restrictions:

(1) If the portion of the aquifer where injection is approved is not a hydrocarbon producing zone and the groundwater has less than 3,000 TDS, then injection shall cease by October 15, 2015, unless and until there is an aquifer exemption for the aquifer or the portion of the aquifer where injection is occurring.

(2) If the portion of the aquifer where injection is approved is not a hydrocarbon producing zone and the groundwater has between 3,000 and 10,000 TDS, then injection shall cease by February 15, 2017, unless and until there is an aquifer exemption for the aquifer or the portion of the aquifer where injection is occurring.

(3) If the portion of the aquifer where injection is approved is a hydrocarbon producing zone and the groundwater has less than 10,000 TDS, then injection shall cease by February 15, 2017, unless and until there is an aquifer exemption for the aquifer or the portion of the aquifer where injection is occurring.

(b) For any underground injection project approved by the Division for injection into one of the 11 aquifers listed in subdivision (b)(1), injection shall cease by December 31, 2016, unless and until the U.S Environmental Protection Agency, subsequent to April 20, 2015, determines that the aquifer or the portion of the aquifer where injection is occurring meets the criteria for aquifer exemption.

(1) The following are the 11 aquifers subject to this subdivision:

(A) The Pico formation within the boundaries of the South Tapo Canyon field;

(B) The Tumey formation within the boundaries of the Blackwell's Corner field;

(C) The Kern River formation within the boundaries of the Kern Bluff field;

(D) The Santa Margarita formation within the boundaries of the Kern Front field;

(E) The Chanac formation within the boundaries of the Kern River field;

(F) The Santa Margarita formation within the boundaries of the Kern River field;

(G) The Walker formation within the boundaries of the Mount Poso field;

(H) The Olcese formation within the boundaries of the Round Mountain field;

(I) The Walker formation within the boundaries of the Round Mountain field;

(J) All aquifers within the Bunker Gas field that are not in a hydrocarbon producing zone and that have groundwater that has less than 10,000 TDS; and

(K) All aquifers within the Wild Goose field that are not in a hydrocarbon producing zone and that have groundwater that has less than 10,000 TDS.

(2) For the purposes of this section, the boundaries of the fields listed in subdivision (b)(1) are defined by Division of Oil, Gas, and Geothermal Resources Field Boundary Specifications 1 through 9, dated April 1, 2015, hereby incorporated by reference (publicly available at ftp://ftp.consrv.ca.gov/pub/oil/UIC Files/Boundary Maps/DOGGR Field Boundary Specifications 1 through 9.pdf).

(c) Notwithstanding subdivisions (a) and (b), approval of an underground injection project, rescission of an approval of an underground injection project, and restriction of an approval of an underground injection project are all at the discretion of the Division.

(d) Any person who violates this section is subject to a minimum civil penalty of $20,000 for each well for each day injection occurs. The Division may impose a greater civil penalty based on consideration of the extent of harm, persistence, pervasiveness, and prior occurrences of the violation, but in no case shall the civil penalty be greater than $25,000 for each well for each day injection occurs.

Authority: Section 3013, Public Resources Code. Reference: Sections 3106, 3220, 3222 and 3236.5, Public Resources Code; and 40 C.F.R. 144.3 and 144.7.

Article 4. Well Stimulation Treatments

§ 1780. Purpose, Scope, and Applicability.

(a) The purpose of this article is to set forth regulations governing well stimulation treatments, as defined in Section 1761(a)(1), for wells located both onshore and offshore.

(b) Well stimulation treatments are not subsurface injection or disposal projects and are not subject to Sections 1724.6 through 1724.10 or Sections 1748 through 1748.3. This article does not apply to underground injection projects. If well stimulation treatment is done on a well that is part of an underground injection project, then regulations regarding well stimulation treatment apply to the well stimulation treatment and regulations regarding underground injection projects apply to the underground injection project operations.

(c) For purposes of this article, a well stimulation treatment commences when well stimulation fluid is pumped into the well, and ends when the well stimulation treatment equipment is disconnected from the well.

Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106 and 3160, Public Resources Code.

§ 1781. Definitions.

The following definitions shall govern this article:

(a) “Acid fracturing” means a well stimulation treatment that, in whole or in part, includes the pressurized injection of acid into an underground geologic formation in order to fracture the formation, thereby causing or enhancing, for the purposes of this division, the production of oil or gas from a well.

(b) “Acid matrix stimulation treatment” means an acid treatment conducted at pressures lower than the applied pressure necessary to fracture the underground geologic formation.

(c) “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.

(d) “Acid stimulation treatment fluid” means one or more base fluids mixed with physical and chemical additives for the purpose of performing an acid well stimulation treatment.

(e) “Additive” means a substance or combination of substances added to a base fluid for purposes of preparing well stimulation treatment fluid, including, but not limited to, acid stimulation treatment fluid and hydraulic fracturing fluid. An additive may serve additional purposes beyond the transmission of hydraulic pressure to the geologic formation. An additive may be of any phase and may include proppants.

(f) “ADSA” or “axial dimensional stimulation area” means the estimated axial dimensions, expressed as maximum length, width, height, and azimuth, of the area(s) stimulated by a well stimulation treatment.

(g) “Base fluid” means the continuous phase fluid used in the makeup of a well stimulation treatment 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.

(h) “Chemical Disclosure Registry” means the chemical registry Internet Web site known as fracfocus.org developed by the Ground Water Protection Council and the Interstate Oil and Gas Compact Commission.

(i) “Designated Contractor for Water Sampling” means an independent third-party person or entity designated by the State Water Board to sample water well and surface water in accordance with Public Resources Code section 3160, subdivision (d)(7).

(j) “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.

(k) “Hydraulic fracturing” means a well stimulation treatment that, in whole or in part, includes the pressurized injection of hydraulic fracturing fluid into an underground geologic formation in order to fracture the formation, thereby causing or enhancing, for the purposes of this division, the production of oil or gas from a well.

(l) “Hydraulic fracturing fluid” means one or more base fluids mixed with physical and chemical additives for the purpose of hydraulic fracturing.

(m) “Independent third party” means a person or entity responsible to an operator, but who is not an employee of the operator, is not under the ownership or direct control of the operator, and does not have a direct financial interest in the production activities of the operator.

(n) “Proppants” means materials inserted or injected into the underground geologic formation that are intended to prevent fractures from closing.

(o) “Regional Water Board” means the Regional Water Quality Control Board with jurisdiction over the location of a well subject to well stimulation treatment.

(p) “State Water Board” means the State Water Resources Control Board.

(q) “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.

(r) “Tenant” means a person or entity with a possessory interest in and right to occupy a legally recognized parcel, or portion thereof.

(s) “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.

Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106, 3150, 3151, 3152, 3153, 3154, 3156, 3158, 3159 and 3160, Public Resources Code.

§ 1782. General Well Stimulation Treatment Requirements.

(a) When a well stimulation treatment is performed, the operator shall ensure that all of the following conditions are continuously met:

(1) Casing is sufficiently cemented or otherwise anchored in the hole in order to effectively control the well at all times;

(2) Geologic and hydrologic isolation of the oil and gas formation are maintained during and following the well stimulation treatment;

(3) All potentially productive zones, zones capable of over-pressurizing the surface casing annulus, or corrosive zones be isolated and sealed off to the extent that such isolation is necessary to prevent vertical migration of fluids or gases behind the casing;

(4) All well stimulation treatment fluids are directed into the zone(s) of interest;

(5) The wellbore's mechanical integrity is tested and maintained;

(6) The well stimulation treatment fluids used are of known quantity and description for reporting and disclosure as required pursuant to this article; and

(7) The well stimulation treatment will not damage the well casing, tubing, cement, or other well equipment, or would not otherwise cause degradation of the well's mechanical integrity during the treatment process;

(8) Well breach occurring during well stimulation treatment will be reported as required in Section 1785, subdivision (d); and

(9) Well stimulation treatment operations are conducted in compliance with all applicable requirements of the Regional Water Board, the Department of Toxic Substances Control, the Air Resources Board, the Air Quality Management District or Air Pollution Control District, the Certified Unified Program Agency, and any other local agencies with jurisdiction over the location of the well stimulation activities.

(b) In addition to specific methods set forth in these regulations, to achieve the objectives of this section, the operator shall follow all applicable well construction requirements, use good engineering practices, and employ best industry standards.

(c) The operator shall terminate well stimulation treatment as soon as it is safe to do so after it determines, or is informed by the Division, that any of the conditions of subdivision (a) are not being met.

Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106 and 3160, Public Resources Code.

§ 1783. Application for Permit to Perform Well Stimulation Treatment.

(a) A well stimulation treatment or repeat well stimulation treatment shall not commence without a valid permit approved by the Division and shall be done in accordance with the conditions of the Division's approval. All well stimulation treatment permits approved by the Division shall include the condition that the well stimulation treatment shall not commence until the State Water Board or the Regional Water Board has provided written approval that the well stimulation treatment is covered under Water Code section 10783.

(b) An application for a permit to conduct well stimulation operations shall include all of the information listed in Section 1783.1 and shall be submitted electronically to the Division on a digital form specified by the Division and available on the Division's public internet Web site at http://www.conservation.ca.gov/DOG/Pages/Index.aspx.

(c) Upon receipt of a complete application for a permit to conduct well stimulation treatment, the Division will provide a copy of the permit application, including information in the application designated as trade secret or confidential, to the Regional Water Board, the Department of Toxic Substances Control, the Air Resources Board, and the local air district where the well stimulation treatment may occur, provided that the manner and timing of providing copies of permit applications has been specified in a written agreement between the Division and the receiving agency.

(d) The operator shall notify the Division at least 72 hours prior to commencing well stimulation so that Division staff may witness. Between three and fifteen hours prior to commencing, the operator shall confirm with the Division that the well stimulation treatment is proceeding. Upon receipt of 72-hour notice from an operator, the Division will relay the notice to the Regional Water Board, the Department of Toxic Substances Control, the Air Resources Board, and the local air district where the well stimulation treatment may occur, provided that the manner and timing of relaying the notice has been specified in a written agreement between the Division and the receiving agency.

(e) If a well is drilled, redrilled, or reworked after the Division approves a permit for a well stimulation treatment on the well, then, when providing the 72-hour notice under subdivision (d), the operator shall indicate what, if any, variance there was from the original notice of intent to drill, redrill, or rework the well.

Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106 and 3160, Public Resources Code.

§ 1783.1. Contents of Application for Permit to Perform Well Stimulation Treatment.

(a) An application for a permit to perform a well stimulation treatment shall include the following:

(1) Operator's name;

(2) Name and telephone number of person filing the form;

(3) Name of person to contact with technical questions regarding operations;

(4) Telephone number and email address of person to contact with technical questions regarding operations;

(5) Lease name and number of the well;

(6) Location of the well, submitted as a six-digit decimal degrees, non-projected, Latitude and Longitude, in the Geographic Coordinate System (GCS) NAD83.

(7) API number assigned to the well by the Division;

(8) Type of well;

(9) Name of the oil field;

(10) County in which the well is located;

(11) The estimated two-week time period during which the well stimulation treatment is planned to occur;

(12) Estimated measured and estimated true vertical depth of the well, and a description of the wellbore path that is specific enough to identify the location of the well stimulation treatment;

(13) Formation name and vertical depth of the top and bottom of the productive horizon where well stimulation treatment will occur;

(14) The maximum number of stages in the well stimulation treatment;

(15) For each stage of the well stimulation treatment, the estimated measured and estimated true vertical depth of the planned interval of the well stimulation treatment on the well bore;

(16) The ADSA for each stage;

(17) For each stage of the well stimulation treatment, the anticipated volume, rate, and pressures of fluid to be injected;

(18) Identification of all wells that have previously been subject to well stimulation treatment in the same production horizon within the area of twice the ADSA;

(19) Identification of where in the operator's Spill Contingency Plan handling of well stimulation fluid and additives has been addressed;

(20) The operator's plan for completing the cement evaluation required under Section 1784.2(a), or a request for approval of an alternate cement evaluation plan under Section 1784.2(c);

(21) The information required for the well stimulation treatment area analysis under Section 1784(a);

(22) The well stimulation treatment design required under Section 1784(b);

(23) A water management plan that includes all of the following:

(A) An estimate of the amount of water to be used in the treatment;

(B) An estimate of water to be recycled following the well stimulation treatment;

(C) A description of how and where the water from a well stimulation treatment will be recycled, including a description of any treatment or reclamation activities to be conducted prior to recycling or reuse;

(D) The anticipated source of the water to be used in the treatment, including any of the following:

(i) The well or wells, if commingled, from which the water will be produced or extracted;

(ii) The water supplier, if it will be purchased from a supplier;

(iii) The point of diversion of surface water; and

(E) The anticipated disposal method that will be used for the recovered water in the flowback fluid from the treatment that is not produced water that would be reported pursuant to Section 3227;

(24) A description of anticipated procedures to comply with the Hazardous Waste Control Law (Health and Safety Code §§ 25100 et seq.) and implementing regulations pertaining to the activities and information provided under this article;

(25) The anticipated source, amount, and composition of the base fluids to be used in the treatment, including pH, flash point, and any constituents listed in California Code of Regulations, title 22, section 66261.24, subdivision (a)(2)(A) and (B);

(26) The estimated amount of treatment-generated waste materials that are not addressed by the water management plan, and the anticipated disposal method for the waste materials;

(27) Documentation from either the State Water Board or the Regional Water Board that the well subject to the well stimulation treatment is covered by a regional groundwater monitoring program pursuant to Water Code section 10783, subdivision (h)(1), or indication that the operator is working with the State Water Board or the Regional Water Board to ensure that the well subject to well stimulation treatment is covered in accordance with Water Code section 10783;

(28) A complete list of the names, Chemical Abstract Service 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 Chemical Abstract Service number does not exist for a chemical constituent, another unique identifier may be used, if available);

(29) Whether it is anticipated that radiological components or tracers will be injected during the well stimulation treatment;

(30) The State Clearinghouse Number or other identification of all documents prepared under the California Environmental Quality Act that relate to the proposed well stimulation treatment; and

(31) Other information as requested by the Division.

(b) A claim of trade secret protection for the information required under this section shall be handled in the manner specified under Public Resources Code section 3160, subdivision (j).

(c) Notwithstanding any claim of trade secret protection, the Division shall not approve as complete an application for a permit to perform a well stimulation treatment unless all of the information specified in this paragraph has been provided to the Division.

Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106 and 3160, Public Resources Code; and Section 10783, Water Code.

§ 1783.2. Neighbor Notification, Duty to Hire Independent Third Party.

(a) The operator of any oil or gas well receiving a permit to conduct well stimulation treatment from the Division shall hire an independent third party to perform the following actions:

(1) Identify surface property owners and tenants, other than the operator of the well subject to well stimulation treatment, of legally recognized parcels of land situated within a

1500-foot radius of the wellhead receiving well stimulation treatment, or within 500 feet of the surface representation of the horizontal path of the subsurface parts of such well;

(2) Provide all surface property owners and tenants so identified, or their duly authorized agents, with neighbor notification that shall include and must be limited to both of the following:

(A) A copy of the approved well stimulation treatment permit; and

(B) A completed Well Stimulation Treatment Neighbor Notification Form (7/15 version), hereby incorporated by reference; and

(3) Compile and mail to the Division a declaration of notice pursuant to subdivision (i).

(b) Neighbor notification is not required if the independent third party determines that there are no surface property owners or tenants as described in subdivision (a)(1).

(c) A well stimulation treatment subject to the neighbor notification requirements of this section shall not commence until 30 calendar days after all required notices are provided, as defined in subdivision (e). If the independent third party has made a determination under subdivision (b) that neighbor notification is not required, then the well stimulation treatment shall not commence until at least 72 hours after the operator provides the Division with a signed written statement from the independent third party certifying that determination.

(d) The notice required under subdivision (a)(2) may be given by any of the following means:

(1) Personal delivery;

(2) Overnight delivery by an express service carrier;

(3) Registered, certified, or express mail;

(4) Electronic mail or facsimile, but only if the person to be notified has agreed in writing prior to the notice to accept notice by electronic mail or facsimile. The prior written agreement shall contain the email address or facsimile number of the person to be notified, which address or number shall be used until otherwise instructed by the person to be notified.

(e) The notice required under this section is deemed to have been provided at the following times:

(1) If given by personal delivery, when delivered;

(2) If given by overnight delivery by an express service carrier, 2 calendar days after the notice is deposited with the carrier;

(3) If given by registered, certified or express mail, 5 calendar days after the notice is deposited in the mail;

(4) If given by electronic mail or facsimile, 2 calendar days after the notice is transmitted.

(f) Any notice that is given to surface property owners by overnight delivery by an express service carrier or by registered, certified, or express mail shall be addressed to the address of record for that person, or his/her duly authorized agent, as shown on the latest equalized assessment roll, county assessor or tax collector records. In addition, if the owner's address of record is different from the physical address of the property within the notification radius, and if that property is capable of receiving mail, a copy of the notice shall also be delivered or mailed to that property.

(g) Notice to a tenant shall not be considered deficient for lack of a named individual. Notice to any tenant can be addressed generally to “current resident,” “current occupant,” or such other non-specific addressee, as may be appropriate.

(h) In addition to the means set forth in subdivision (d), tenants of a residential or commercial property that has 10 or more individual units for lease may be provided notice by leaving the copy of the permit and Well Stimulation Treatment Neighbor Notification Form at each individual residential or commercial unit within the residential or commercial property between the hours of eight in the morning and six in the evening, with some person not less than 18 years of age who provides a signature acknowledging receipt of the notice. Notice given in accordance with this subdivision shall be treated as a personal delivery for purposes of determining when such notice is deemed provided under subdivision (e).

(i) The independent third party hired by the operator to provide notice under this section shall, within 5 calendar days of all required notices having been provided for a well stimulation treatment, submit to the Division in a text-searchable electronic format, directed to the email address “NeighborNotificationWST@conservation.ca.gov” a declaration of notice that provides all of the following:

(1) Identifying information for the well receiving well stimulation treatment and the operator of that well;

(2) A list of all notices provided, itemized by the County Assessor's Parcel Number for the property within the notification radius that corresponds to each notice provided;

(3) The name of each surface property owner and tenant notified, or indication that the addressee was unspecified, as allowed under subdivision (g);

(4) The specific method of providing each notice, including the physical or electronic address to which each notice was sent;

(5) The date each notice was personally delivered, deposited with an express carrier or mail service, or transmitted electronically;

(6) The date each notice is deemed to have been provided in accordance with subdivision (e); and

(7) Representative copies of the completed Well Stimulation Treatment Neighbor Notification Form that were provided.

(j) If any additional surface property owners or tenants are notified after the original declaration of notice is provided to the Division, then the independent third party shall within 5 calendar days submit to the Division a supplemental declaration of notice that contains the information listed in subdivision (i).

(k) Each independent third party hired by the operator to provide notice under this section shall retain copies of all of the following:

(1) A representative copy of the well stimulation treatment permits provided to surface property owners and tenants;

(2) Representative copies of the completed Well Stimulation Treatment Neighbor Notification Form provided to surface property owners and tenants;

(3) Documentation demonstrating that the notices required under this section were provided, including documentation from the United States Postal Service or express service carrier such as proof of payment records, return receipts, delivery confirmations, and tracking records; and

(4) Records relied upon to identify surface property owners and tenants who must receive notice under this section.

(l) Records specified for retention under subdivision (k) shall be made available to the Division promptly upon request, and shall be maintained for at least 5 years from the date that the declaration of notice required under subdivision (h) is submitted to the Division.

Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106 and 3160, Public Resources Code.

§ 1783.3. Availability of Water Testing, Request for Water Testing.

(a) A surface property owner notified pursuant to Section 1783.2 may request water quality testing on any existing water well or surface water located on the parcel that is suitable for drinking or irrigation purposes.

(b) When a surface property owner makes a request for water quality testing on any water well or surface water pursuant to subdivision (a), sampling and testing shall be in accordance with the following:

(1) Water quality testing shall be performed by a Designated Contractor for Water Sampling.

(2) Water quality testing shall be conducted in accordance with the standards and protocols specified by the State Water Board pursuant to Public Resources Code section 3160, subdivision (d)(7)(B).

(3) Water quality testing shall include baseline measurements prior to the commencement of the well stimulation treatment, and follow-up measurements after the well stimulation treatment is completed.

(4) Any written request for water testing shall specify whether the surface property owner elects to select the Designated Contractor for Water Sampling and communicate directly with the contractor to arrange for testing, or, alternatively, elects to have the operator select the Designated Contractor for Water Sampling and arrange for testing.

(A) If the surface property owner elects to have the operator select and contract with the Designated Contractor for Water Sampling, the well stimulation treatment may not commence until the requested baseline water sampling is completed, provided that the request is made in writing and postmarked to the operator within 20 calendar days from the date notice is provided under section 1783.2(e) and the surface property owner makes necessary accommodations to enable the collection of baseline measurements without undue delay.

(B) If the surface property owner elects to select the Designated Contractor for Water Sampling and communicate directly with the contractor to arrange for testing, the surface property owner is responsible for scheduling baseline measurements to be taken prior to the commencement of the well stimulation treatment. The operator shall immediately inform the surface property owner when the well stimulation treatment is completed so that follow-up measurements can be collected.

(5) The operator shall pay for all reasonable costs of water quality testing under this subdivision regardless of whether the surface property owner or the operator selects and coordinates with the Designated Contractor for Water Sampling.

(6) The results of any water quality testing shall be provided to the Division, the appropriate Regional Water Board, the State Water Board, the surface property owner, and any tenant notified pursuant to Section 1783.2 to the extent authorized by the tenant's lease.

(7) The Regional Water Board shall be notified at least two working days prior to collecting a sample under this section so that Regional Water Board staff may witness the sampling.

(c) Water quality data collected under subdivision (b) shall be submitted to the Regional Water Board in an electronic format that follows the guidelines detailed in California Code of Regulations, title 23, chapter 30.

(d) A tenant notified pursuant to Section 1783.2 that has lawful use of any existing water well or surface water located on the parcel that is suitable for drinking or irrigation purposes may independently contract with a Designated Contractor for Water Sampling for water quality testing of such water. A tenant that contracts for such testing is responsible for scheduling baseline measurements to be taken prior to the commencement of the well stimulation treatment. A tenant that contracts for water testing pursuant to this section is not entitled to reimbursement from the operator for the costs of such testing. If the operator is made aware of the tenant's contracting for water quality testing, then the operator shall immediately notify the tenant when the well stimulation treatment is completed so that follow-up measurements can be collected.

Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106 and 3160, Public Resources Code.

§ 1784. Well Stimulation Treatment Area Analysis and Design.

(a) As part of an application for a permit to conduct well stimulation, the operator shall conduct a well stimulation treatment area analysis to ensure the geologic and hydrologic isolation of the oil and gas formation during and following well stimulation treatment.

(1) The operator shall utilize modelling, or other analysis, approved by the Division that will effectively estimate the ADSA. The operator shall submit the ADSA and information supporting the modeling or analysis to the Division.

(2) The well stimulation treatment area analysis shall include identification and review of all well bores located completely or partially within two times the ADSA to ensure the geologic and hydrologic isolation of the oil and gas formation during and following well stimulation. The Division may allow modification of the review area based on modeling and analysis provided by the operator that demonstrates geologic and hydrologic isolation of the oil and gas formation during and following well stimulation treatment. For each well bore within the review area the well stimulation treatment area analysis shall include the following information:

(A) Casing diagrams clearly indicating:

(i) Sizes and weights of casing;

(ii) Depths of shoes, stubs, and liner tops;

(iii) Depths of perforation intervals, water shutoff holes, cement port, cavity shots, cuts, casing damage, and top of junk or fish left in well;

(iv) Diameter and depth of hole;

(v) Cement plugs inside casings, including top and bottom of cement plug, with indication of method of determining;

(vi) Cement fill behind casings, including top and bottom of cement fill, with indication of method of determining;

(vii) Type and weight (density) of fluid between cement plugs;

(viii) Depths and names of the formations, zones, and sand markers penetrated by the well, including the top and bottom of the zone where well stimulation treatment will occur;

(ix) All steps of cement yield and cement calculations performed;

(x) All information used to calculate the cement slurry (volume, density, yield), including but not limited to, cement type and additives, for each cement job completed in each well; and

(xi) All of the information listed in this paragraph for all previous redrilled or sidetracked well bores.

(B) For directionally drilled wells, a wellbore path giving both inclination and azimuth measurements.

(3) The well stimulation treatment area analysis shall include a review of all geologic features, including known faults (active or inactive), within five times the ADSA to ensure the geologic and hydrologic isolation of the oil and gas formation during and following well stimulation. For all such geologic features, the operator shall provide:

(A) An evaluation of whether the geologic feature may act as a migration pathway for injected fluids or displaced formation fluids; and

(B) An assessment of the risk that the well stimulation treatment will communicate with the geologic feature.

(4) If five times the ADSA extends beyond the productive horizon being evaluated for possible well stimulation treatment, then the well stimulation treatment area analysis shall include a review of the geological formations adjacent to the productive horizon. The operator shall assess the mechanical rock properties, including permeability, relative hardness (using Young's Modulus), relative elasticity (using Poisson's Ratio), and other relevant characteristics of the geological formations to determine whether the geological formations will ensure the geologic and hydrologic isolation of the oil and gas formation during and following well stimulation.

(5) The well stimulation treatment area analysis shall include identification of all water within two times the ADSA.

(b) Utilizing the well stimulation treatment area analysis conducted pursuant to subdivision (a), the operator shall design the well stimulation treatment so as to ensure that the well stimulation treatment fluids or hydrocarbons do not migrate and remain geologically and hydrologically isolated to the hydrocarbon formation. A well stimulation treatment shall not be designed to employ pressure exceeding 80% of the API rated minimum internal yield on any casing string in communication with the well stimulation treatment.

Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106 and 3160, Public Resources Code.

§ 1784.1. Pressure Testing Prior to Well Stimulation Treatment.

(a) The operator shall conduct pressure testing not more than 30 days before commencing well stimulation treatment, but after all operations that could affect well integrity or the integrity of the equipment are complete. Pressure testing shall include the following:

(1) All cemented casing strings and all tubing strings to be utilized in the well stimulation treatment operations shall be pressure tested for at least 30 minutes at a pressure equal to at least 100% of the maximum surface pressure anticipated during the well stimulation treatment, but not greater than the API rated minimum internal yield of the tested casing. The operator shall chart the pressure testing. If during testing, and after equilibrium has been reached, there is a pressure change of 10% or more from the original test pressure, then the operator shall immediately notify the Division, the operator shall provide the Division with copies of the charting of the pressure testing, and the tested casing or tubing shall not be used until the cause of the pressure drop is identified and corrected to the Division's satisfaction. No casing or tubing shall be used unless it has been successfully tested pursuant to this section.

(2) All surface equipment to be utilized for well stimulation treatment shall be rigged up as designed. The pump, and all equipment downstream from the pump, shall be pressure tested at a pressure equal to 125% of the maximum surface pressure anticipated during the well stimulation treatment, but not greater than the manufacturer's pressure rating for the equipment being tested. If during testing there is a pressure change of 10% or more from the original test pressure, then the operator shall immediately notify the Division, and the tested equipment shall not be used until the cause of the pressure change is identified and corrected to the Division's satisfaction. No equipment shall be used unless it has been successfully tested pursuant to this section.

(b) The operator shall notify the Division at least 24 hours prior to conducting the pressure testing required under subdivision (a) so that Division staff may witness. The charting of pressure testing required under subdivision (a)(1) shall be provided to the Division not less than 12 hours before commencing well stimulation treatment.

Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106 and 3160, Public Resources Code.

§ 1784.2. Cement Evaluation Prior to Well Stimulation Treatment.

(a) In advance of conducting well stimulation treatment, but at least 48 hours after cement placement, the operator shall run a radial cement evaluation log or other cement evaluation method that is approved by the Division, and the cement evaluation shall demonstrate the following:

(1) The well was and continues to be cemented in accordance with the requirements of Section 1722.4 if it is an onshore well, or Section 1744.3 if it is an offshore well; and

(2) The quality of the cement is sufficient to ensure the geologic and hydrologic isolation of the oil and gas formation during and following well stimulation treatment.

(b) Documentation of the cement evaluation shall be provided to the Division not less than 72 hours before commencement of the well stimulation treatment. If the Division identifies a

concern with the cement evaluation, the well stimulation treatment shall not commence until the concern has been addressed to the Division's satisfaction.

(c) The Division may approve an alternate cement evaluation plan that waives the requirements of subdivisions (a) and (b) if the Division is satisfied that, based on geologic and engineering information available from previous drilling or producing operations in the area where the well stimulation treatment will occur, well construction and cementing methods have been established that ensure that there will be no voids in the annular space of the well. A request for approval of an alternate cement evaluation plan shall be submitted to the Division as part of the application for a permit to perform well stimulation treatment submitted under Section 1783.

Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106 and 3160, Public Resources Code.

§ 1785. Monitoring During Well Stimulation Treatment Operations.

(a) The operator shall continuously monitor and record all of the following parameters during the well stimulation treatment, if applicable:

(1) Surface injection pressure;

(2) Slurry rate;

(3) Proppant concentration;

(4) Fluid rate; and

(5) All annuli pressures.

(b) The operator shall terminate the well stimulation treatment and immediately provide the collected data to the Division if any of the following occurs:

(1) A pressure change in the annulus between the tubing or casing through which well stimulation treatment fluid is conducted and the next larger tubular or casing more than 20% or greater than the calculated pressure increase due to pressure and/or temperature expansion;

(2) Pressure exceeding 90% of the API rated minimum internal yield on any casing string in communication with the well stimulation treatment, if the pressure testing under Section 1784.1(a)(1) was done at a pressure equal to 100% of the API rated minimum internal yield of the tested casing;

(3) Pressure exceeding 80% of the API rated minimum internal yield on any casing string in communication with the well stimulation treatment, if the pressure testing under Section 1784.1(a)(1) was done at a pressure equal to less than 100% of the API rated minimum internal yield of the tested casing; or

(4) The operator has reason to suspect a potential breach in the cemented casing strings, the tubing strings utilized in the well stimulation treatment operations, or the geologic or hydrologic isolation of the formation.

(c) If any of the events listed in subdivision (b) occurs, then the operator shall perform diagnostic testing on the well to determine whether a breach has occurred. Diagnostic testing shall be done as soon as is reasonably practical. The Division shall be notified when diagnostic testing is being done so that Division staff may witness the testing. All diagnostic testing results shall be immediately provided to the Division.

(d) If diagnostic testing reveals that a breach has occurred, then the operator shall immediately shut-in the well, isolate the perforated interval, and notify the Division and the Regional Water Board with all of the following information:

(1) A description of the activities leading up to the well breach.

(2) Depth interval of the well breach and methods used to determine the depth interval.

(3) An exact description of the chemical constituents of the well stimulation treatment fluid, or of the fluid that is most representative of the fluid composition in the well at the time of the well breach.

(e) The operator shall not resume operation of a well that has been shut-in under subdivision (d) without first obtaining approval from the Division.

(f) Groundwater quality data submitted under subdivision (d) shall be in an electronic format that follows the guidelines detailed in California Code of Regulations, title 23, chapter 30.

(g) If the surface casing annulus is not open to atmospheric pressure, then the surface casing pressures shall be monitored with a gauge and pressure relief device. The maximum set pressure on the relief device shall be the lowest of the following and well stimulation treatment shall be terminated if pressures in excess of the maximum set pressure are observed in the surface casing annulus:

(1) A pressure equal to: 0.70 times 0.433 times the true vertical depth of the surface casing shoe (expressed in feet);

(2) 70% of the API rated minimum internal yield for the surface casing; or

(3) A pressure change that is 20% or greater than the calculated pressure increase due to pressure and/or temperature expansion.

Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106 and 3160, Public Resources Code.

§ 1785.1. Monitoring and Evaluation of Seismic Activity in the Vicinity of Hydraulic Fracturing.

(a) From commencement of hydraulic fracturing until 10 days after the end of hydraulic fracturing, the operator shall monitor the California Integrated Seismic Network for indication of an earthquake of magnitude 2.7 or greater occurring within a radius of five times the ADSA.

(b) If an earthquake of magnitude 2.7 or greater is identified under subdivision (a), then the following requirements shall apply:

(1) The operator shall immediately notify the Division and inform the Division when the earthquake occurred relative to the hydraulic fracturing operations.

(2) The Division, in consultation with the operator and the California Geological Survey, will conduct an evaluation of the following:

(A) Whether there is indication of a causal connection between the hydraulic fracturing and the earthquake;

(B) Whether there is a pattern of seismic activity in the area that correlates with nearby hydraulic fracturing; and

(C) Whether the mechanical integrity of any active well within the radius specified in subdivision (a) has been compromised.

(3) No further hydraulic fracturing shall be done within the radius specified in subdivision (a) until the Division has completed the evaluation under subdivision (b)(2) and is satisfied that hydraulic fracturing within that radius does not create a heightened risk of seismic activity.
Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106 and 3160, Public Resources Code.

§ 1786. Storage and Handling of Well Stimulation Treatment Fluids and Wastes.

(a) Operators shall adhere to the following requirements for the storage and handling of well stimulation treatment fluid, additives, and produced water from a well that has had a well stimulation treatment:

(1) Fluids shall be stored in compliance with the secondary containment requirements of Section 1773.1, except that secondary containment is not required under this section for production facilities that are in one location for less than 30 days. The operator's Spill Contingency Plan shall account for all production facilities outside of secondary containment and include specific steps to be taken and equipment available to address a spill outside of secondary containment.

(2) Operators shall be in compliance with all applicable testing, inspection, and maintenance requirements for production facilities containing well stimulation treatment fluids.

(3) Fluids shall be accounted for in the operator's Spill Contingency Plan.

(4) Fluids shall be stored in containers and shall not be stored in sumps or pits.

(5) In the event of an unauthorized release, the operator shall immediately implement the Spill Contingency Plan; notify the Regional Water Board and any other appropriate response entities for the location and the type of fluids involved, as required by all applicable federal, state, and local laws and regulations; and shall perform clean up and remediation of the area, and dispose of any cleanup or remediation waste, as required by all applicable federal, state, and local laws and regulations.

(6) Within 5 days of the occurrence of an unauthorized release, the operator shall provide the Division a written report that includes:

(A) A description of the activities leading up to the release;

(B) The type and volumes of fluid released;

(C) The cause(s) of release;

(D) Action taken to stop, control, and respond to the release; and

(E) Steps taken and any changes in operational procedures implemented by the operator to prevent future releases.

(7) Operators shall conduct all activities that relate to storage and management of fluids in compliance with all applicable requirements of the Regional Water Board, the Department of Toxic Substances Control, the Air Resources Board, the Air Quality Management District or Air Pollution Control District, the Certified Unified Program Agency, and any other state or local agencies with jurisdiction over the location of the well stimulation activities.

(8) An operator who generates a waste, as defined in Health and Safety Code section 25124 and California Code of Regulations, title 22, section 66261.2, in the course of conducting well stimulation activities, including but not limited to well stimulation treatment fluid, additives,

produced water from a well, solids separated from well stimulation treatment fluid, remediation wastes, or any other wastes generated from the processing, treatment or management of these wastes, shall determine if the waste is a hazardous waste by sampling and testing the waste according to the methods set forth in California Code of Regulations, title 22, division 4.5, chapter 11, article 3 (section 66261.20 et seq.), or according to an equivalent method approved by the Department of Toxic Substances Control pursuant to California Code of Regulations, title 22, section 66260.21, except where the operator has determined that the waste is excluded from regulation under California Code of Regulations, title 22, section 66261.4 or Health and Safety Code section 25143.2. Notwithstanding any other section in this article, wastes that are determined by the operator to be hazardous wastes shall be managed in compliance with all hazardous waste management requirements of the Department of Toxic Substances Control. *Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106 and 3160, Public Resources Code.*

§ 1787. Well Monitoring After Well Stimulation Treatment.

(a) Operators shall monitor each well that has had a well stimulation treatment as specified in subdivision (d) to identify any indication of a well breach. If monitoring indicates that a well breach may have occurred, then the operator shall perform diagnostic testing on the well to determine whether a breach has occurred. Diagnostic testing shall be done as soon as is reasonably practical. The Division shall be notified when diagnostic testing is being done so that Division staff may witness the testing. All diagnostic testing results shall be immediately provided to the Division.

(b) If diagnostic testing reveals that a breach has occurred, then the operator shall immediately shut-in the well, isolate the perforated interval, and notify the Division and the Regional Water Board with all of the following information:

(1) A description of the activities leading up to the well breach.

(2) Depth interval of the well breach and methods used to determine the depth interval.

(3) An exact description of the chemical constituents of the fluid that is most representative of the fluid composition in the well at the time of the well breach.

(c) The operator shall not resume operation of a well that has been shut-in under subdivision (b) without first obtaining approval from the Division.

(d) Operators shall adhere to the following requirements for a well that has had a well stimulation treatment:

(1) The production pressure of the well shall be monitored at least once every two days for the first thirty days after the well stimulation treatment and on a monthly basis thereafter. Information regarding production pressures shall be reported to the Division on a monthly basis.

(2) The annular pressures of the well shall be reported to the Division annually, unless it has been demonstrated to the Division's satisfaction that there are no voids in the annular space. It shall be immediately reported to the Division if annular pressure exceeds 70% of the API rated minimum internal yield or collapse strength of casing, or if surface casing pressures exceed a pressure equal to: 0.70 times 0.433 times the true vertical depth of the surface casing shoe (expressed in feet).

(3) The annular valve shall be kept accessible from the surface or left open and plumbed to the surface with a working pressure gauge unless it has been demonstrated to the Division's satisfaction that there are no voids in the annular space.

(4) A properly functioning pressure relief device shall be installed on the annulus between the surface casing and the production casing, or, if intermediate casing is set, on the annuli between the surface casing and the intermediate casing and the production casing. This requirement may be waived by the Division, if the operator demonstrates to the Division's satisfaction that the installation of a pressure relief device is unnecessary based on technical analysis and/or operating experience in the area.

(5) If a pressure relief device is installed, then all pressure releases from the device shall be immediately reported to the Division. The maximum set pressure of a surface casing pressure relief device shall be the lowest of the following:

(A) A pressure equal to: 0.70 times 0.433 times the true vertical depth of the surface casing shoe (expressed in feet);

(B) 70% of the API rated minimum internal yield for the surface casing; or

(C) A pressure change that is 20% or greater than the calculated pressure increase due to pressure and/or temperature expansion

Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106 and 3160, Public Resources Code.

§ 1788. Required Public Disclosures.

(a) Except as provided in subdivision (c), within 60 days after the cessation of a well stimulation treatment, the operator shall publicly disclose all of the following information:

(1) Operator's name;

(2) API number assigned to the well by the Division;

(3) Lease name and number of the well;

(4) Location of the well, submitted as a six-digit decimal degrees, non-projected, Latitude and Longitude, in the Geographic Coordinate System (GCS) NAD83.

(5) County in which the well is located;

(6) Date that the well stimulation treatment occurred;

(7) The measured and true vertical depth of the well;

(8) Formation name and vertical depth of the top and bottom of the productive horizon where well stimulation treatment occurred;

(9) The trade name, supplier, concentration, and a brief description of the intended purpose of each additive contained in the well stimulation fluids used;

(10) The total volume of base fluid used during the well stimulation treatment;

(11) 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;

(12) The source, volume, and specific composition and disposition of all water associated with the well stimulation treatment, including all of the following:

(A) The source of the water used as a base fluid for the well stimulation treatment, including any of the following:

(i) The well or wells, if commingled, from which the water was produced or extracted;

(ii) The water supplier, if purchased from a supplier;

(iii) The point of diversion of surface water;

(B) Composition of water used as base fluid, including all of the following: total dissolved solids; metals listed in California Code of Regulations, title 22, section 66261.24, subdivision (a)(2)(A); benzene, toluene, ethyl benzene, and xylenes; major and minor cations (including sodium, potassium, magnesium, and calcium); major and minor anions (including nitrate, chloride, sulfate, alkalinity, and bromide); and trace elements (including lithium, strontium, and boron);

(C) Specific disposition of water recovered from the well following the well stimulation treatment, including method and location of disposal and, if the recovered water is injected into an injection well, identification of the operator, field, and project number of the injection project;

(D) Composition of water recovered from the well following the well stimulation treatment, sampled after a calculated wellbore volume has been produced back but before three calculated wellbore volumes have been produced back, and then sampled a second time after 30 days of production after the first sample is taken, with both samples taken prior to being placed in a storage tank or being aggregated with fluid from other wells;

(E) Composition of water recovered from the well following the well stimulation treatment shall be determined by testing the samples taken under paragraph (D) for all of the following: appropriate indicator compound(s) for the well stimulation treatment fluid; total dissolved solids; metals listed in California Code of Regulations, title 22, section 66261.24, subdivision (a)(2)(A) ; benzene, toluene, ethyl benzene, and xylenes; major and minor cations (including sodium, potassium, magnesium, and calcium); major and minor anions (including nitrate, chloride, sulfate, alkalinity, and bromide); and trace elements (including lithium, strontium, and boron); radium-226, gross alpha-beta, radon 222, fluoride, iron (redox), manganese (redox), H2S (redox), nitrate+nitrite (redox), strontium, thallium, mercury, and methane;

(F) All testing results shall have a cover page briefly describing when and where sampling was done and the results of the testing;

(G) Sampling and testing conducted under subdivision (a)(12) is separate from and in addition to any sampling or testing that may be required to make hazardous waste determinations under the requirements of the Department of Toxic Substances Control;

(13) Identification of any reuse of treated or untreated water for well stimulation treatments and well stimulation treatment-related activities;

(14) The specific composition and disposition of all well stimulation treatment fluids, including waste fluids, other than water;

(15) Any radiological components or tracers injected into the well as part of 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;

(16) The radioactivity of the recovered well stimulation fluids, and a brief description of the equipment and method used to determine the radioactivity;

(17) For each stage of the well stimulation treatment, the measured and true vertical depth of 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;

(18) The estimated volume of well stimulation treatment fluid that has been recovered; and

(19) A complete list of the names, Chemical Abstract Service numbers, and maximum concentration, in percent by mass, of each and every chemical constituent of the well stimulation treatment fluids used. If a Chemical Abstract Service number does not exist for a chemical constituent, the operator may provide another unique identifier, if available.

(b) For hydraulic fracturing well stimulation treatments, the operator shall post the information listed in subdivision (a) to the Chemical Disclosure Registry, to the extent that the website is able to receive the information. For all well stimulation treatments, the operator shall provide all of the information listed in subdivision (a) directly to the Division on the Well Stimulation Treatment Disclosure Reporting Form. The Well Stimulation Treatment Disclosure Reporting Form is available on the Division's public internet website at ftp://ftp.consrv.ca.gov/pub/oil/forms/Oil%26Gas/OG110S.XLSX. The Well Stimulation Treatment Disclosure Reporting Form shall be submitted to the Division in an electronic format, directed to the email address “DisclosureWST@conservation.ca.gov”. The Division will organize the information provided on Well Stimulation Treatment Disclosure Forms in a format, such as a spreadsheet, that allows the public to easily search and aggregate, to the extent practicable, each type of information disclosed.

(c) Except for the information specified in subdivision (a)(1) through (6), operators are not required to publicly disclose information found in a well record that the Division has determined is not public record, pursuant to Public Resources Code section 3234. If information listed in subdivision (a) is not publicly disclosed on this basis, then the operator shall inform the Division in writing, and provide the Division the information that is not being publicly disclosed. The Division will provide the information that is not publicly disclosed to other state agencies as needed for regulatory purposes and in accordance with a written agreement with the other state agency regarding sharing of confidential information. It is the operator's responsibility to publicly disclose the withheld information in the manner described in subdivision (b) as soon as the information becomes public record under Public Resources Code section 3234.

(d) A claim of trade secret protection for the information required to be disclosed under this section shall be handled in the manner specified under Public Resources Code section 3160, subdivision (j).

(e) Groundwater quality data reported under this section shall also be submitted to the Regional Water Board in an electronic format that follows the guidelines detailed in California Code of Regulations, title 23, chapter 30.

(f) If for any reason information specified in subdivision (a) cannot be collected within 60 days after the cessation of a well stimulation treatment, then the information shall still be publicly disclosed as soon as possible in the manner described in subdivision (b).
Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106, 3160 and 3234, Public Resources Code.

§ 1789. Post-Well Stimulation Treatment Report.

(a) Within 60 days after the cessation of a well stimulation treatment, the operator shall submit a report to the Division describing:

(1) The pressures recorded during monitoring required under Section 1785(a) during the well stimulation treatment;

(2) The pressures recorded during the first 30 days of production pressure monitoring under Section 1787(d)(1);

(3) The date and time that each stage of the well stimulation treatment was performed;

(4) How the actual well stimulation treatment differs from what was anticipated in the well stimulation treatment design that was prepared under Section 1784(b);

(5) How the actual location of the well stimulation treatment differs from what was indicated in the permit application under Section 1783.1(a)(15); and

(6) A description of hazardous wastes generated during the well stimulation activities and their disposition, including copies of all hazardous waste manifests used to transport the hazardous wastes offsite to an authorized facility.

(b) If information found in a report submitted under this section is found in a well record that the Division has determined is not public record, pursuant to Public Resources Code section 3234, then the Division will provide the information to other state agencies as needed for regulatory purposes and in accordance with a written agreement with the other state agency regarding sharing of confidential information.
Authority: Sections 3013 and 3160, Public Resources Code. Reference: Sections 3106, 3160 and 3215, Public Resources Code.

Subchapter 2.1. Methane Gas Hazards Reduction Assistance

§ 1790. Purpose.

This subchapter specifies the criteria and procedures to be followed by the Department of Conservation in administering the Methane Gas Hazards Reduction Program for Eligible Jurisdictions under Section 3860 of the Public Resources Code.
Authority: Section 3863, Public Resources Code. Reference: Sections 3860 and 3863, Public Resources Code.

§ 1791. Definitions.

(a) “CEQA” means the California Environmental Quality Act.

(b) “Department” in reference to the government of this State, means the Department of Conservation in the Resources Agency.

(c) “Director” means the Director of Conservation.

(d) “Eligible Activity” means any one of the four purposes listed in Section 3860 of the Public Resources Code.

(e) “Eligible Jurisdiction” per Section 3855(b) of the Public Resources Code means counties and cities identified as having methane gas hazards in the study conducted by the State Oil and Gas Supervisor pursuant to Article 4.1 (commencing with Section 3240) of the Public Resources Code.

(f) “Final Application” means the application that is filed after the Department has approved a preapplication and has notified the eligible jurisdiction of its grant award.

(g) “Notice of Intent to File” means a brief project description and an estimate of the anticipated project expenditures to be covered by a grant award. This notice will be used by the Director to determine the number of jurisdictions that plan to request a grant award and the equitable amount of grant monies that ultimately may be applied for by each eligible jurisdiction.

(h) “Methane Gas Hazards” per Section 3855(a) of the Public Resources Code means collections of biogenic or thermogenic gases identified as hazards in the study conducted by the State Oil and Gas Supervisor pursuant to Article 4.1 (commencing with Section 3240) of the Public Resources Code.

(i) “Mitigation Project” is an eligible activity that identifies the potential adverse impact of accumulations of methane gas and implements measures to reduce or eliminate those impacts.

(j) “Preapplication” means a report that contains a detailed project preapplication as described in Section 1793(e) of this chapter. This preapplication will be used by the Director to evaluate project proposals.

Authority: Section 3863, Public Resources Code. Reference: Sections 3240, 3855, 3860 and 3863, Public Resources Code.

§ 1792. Amount of Financial Assistance Available.

(a) The Department shall distribute approximately three hundred and fifty thousand dollars ($350,000) in the 1988-89 fiscal year as grant awards for planning, equipment purchases, installation, and other measures related to the mitigation of methane gas hazards. Ongoing maintenance and monitoring activities of eligible jurisdictions shall not be financed by grants pursuant to this chapter.

(b) The amount of the initial grant monies available for each eligible jurisdiction shall be determined by the Director, following a review of the notices of intent to file grant applications. Within 15 days following the receipt of all notices, the Director will notify each jurisdiction of the approximate amount available for their proposed activity.

(c) Any funds distributed after the initial award shall be based upon the availability of remaining funds and a demonstration of the need for additional funds to augment an initial award, or to begin a new eligible activity.

Authority: Section 3863, Public Resources Code. Reference: Sections 3860, 3863 and 3865, Public Resources Code; and 1987 Statutes, Chapter 1322, Section 4.

§ 1793. Application and Award Procedures.

(a) Within 15 days of the effective date of this subchapter, the Department shall notify jurisdictions of their eligibility to apply for grants. A notice of intent to file an application for a grant shall then be submitted by a jurisdiction to the Director no later than 30 days after notification of eligibility by the Department. The notice of intent to file should include a brief project description and an estimate of the anticipated expenditures to be covered by a grant award.

(b) Per Section 3861 of the Public Resources Code, eligible jurisdictions must provide opportunity for public review and comment, and shall hold at least one public hearing in regard to how the funds are to be expended. The hearing shall be held within 90 days after a jurisdiction is notified (per Section 1792(b)) of the approximate amount available for the proposed activity.

(c) Eligible jurisdictions shall submit a preapplication to the Director within 30 days after the last scheduled public hearing. The preapplication shall provide information indicated in Section 1793(e) and a description of how the grant award is to be expended. Also, the jurisdiction shall submit a copy of any public comments received regarding the preapplication and the jurisdiction's response to the public comments.

(d) The decision to award grants for the purposes set forth in Section 3860 of the Public Resources Code will be based upon information included in the preapplication.

(e) The preapplication shall include:

(1) Name, mailing address, and phone numbers of the project director, the budget officer, and the project manager.

(2) A detailed project narrative that includes:

(A) A detailed project description, including the problem to be solved and an explanation of how the funds are to be used to solve or mitigate the problem.

(B) The anticipated effect of the project on mitigating the methane gas hazard in the area.

(C) The expected benefits to the jurisdiction.

(D) Budget (including other funding sources investigated or secured for the project). The budget should include estimates for direct and indirect expenses.

(E) A work statement describing tasks and products (reports, technical studies, engineering plans, etc.)

(F) A project schedule to present the relationship between work tasks and the amount of time required for the work to be completed.

(G) A statement of applicable laws and regulations, including CEQA, that may affect the project.

(H) Related activities undertaken, if any.

(I) Any other information that may be relevant.

Authority: Section 3863, Public Resources Code. Reference: Sections 3861, 3862 and 3863, Public Resources Code.

§ 1794. Preapplication Criteria.

In evaluating the preapplications, the Department shall consider, but not be limited to, the following criteria:

(a) Urgency of need.

(b) Consistency with the purposes and allowable activities.

(c) Cost effectiveness.

(d) Extent to which the requested grant amount is used to leverage other funding sources.

(e) Availability of alternative sources of funding.

(f) Likelihood that the project objectives will be achieved.

(g) Compliance with CEQA and other applicable laws and regulations.

Authority: Section 3863, Public Resources Code. Reference: Section 3863, Public Resources Code.

§ 1795. Preapplication Review.

(a) Within 15 days of receipt of a preapplication, the Department shall provide written comments addressing the completeness of the submitted information. The preapplication shall be deemed complete when the preapplication is considered by the Department to be adequate for evaluation purposes. The staff of the Department of Conservation shall complete the review of preapplications within 60 days of receipt of a complete preapplication.

(b) Within 15 days of receipt of written comments, an applicant may request a meeting with the staff to discuss the staff comments concerning completeness of the application. The meeting should be held within 10 days of the request.

(c) Notification of grant awards or denials will be made by the Director within 15 days following completion of staff review. Even though a jurisdiction is notified that they will receive a grant, payment of the grant monies cannot be made until the provisions of Sections 3861 and 3862 of the Public Resources Code have been fulfilled, and the final application that meets the requirements of Section 1796 of this chapter has been filed with the Department.

Authority: Section 3863, Public Resources Code. Reference: Sections 3861, 3862 and 3863, Public Resources Code.

§ 1796. Final Application Requirements.

The final application shall include:

(a) Evidence that the items required by subsections (a), (b), and (c) of Section 3862 of the Public Resources Code have been completed.

(b) A resolution or notification from the eligible jurisdiction's governing body authorizing the request for the grant award.

(c) A statement of compliance with CEQA requirements, if CEQA compliance was necessary for the activity.

Authority: Section 3863, Public Resources Code. Reference: Section 3863, Public Resources Code.

§ 1797. Fiscal Requirements for Grants.

(a) Eligible jurisdictions receiving a grant shall establish a separate ledger account for expenditures that will be paid or are expected to be paid by grant funds. This will provide separate accountability for grant activities, ensure that expenditures to be paid by grant funds are not commingled with other funds, and feature accounting records that are supported by source documents.

(b) Financial reports to the Department shall be submitted on a semi-annual basis.

Authority: Section 3863, Public Resources Code. Reference: Section 3863, Public Resources Code.

§ 1798. General Information.

(a) All correspondence, notices of public hearings, notices of intent, preapplications, final applications, and financial reports shall be submitted to the Department of Conservation in Sacramento and to the Division of Oil, Gas, and Geothermal Resources in Cypress. The addresses will be provided when a jurisdiction is notified of their eligibility to receive a grant award.

(b) Extensions of time periods indicated in this subchapter may be granted upon the showing of good cause.

Authority: Section 3863, Public Resources Code. Reference: Section 3863, Public Resources Code.

Subchapter 3. Unit Operations

Article 1. General

§ 1810. Purpose.

It is the purpose of this subchapter to set forth the rules and regulations governing the submittal of proposed unit agreements, modifications thereof, additions thereto, and disagreements with respect to unit operations as provided in Chapter 3.5 (commencing with Section 3630) of Division 3 of the Public Resources Code and to implement, interpret and to make specific the provisions of said Chapter 3.5.

Authority: Section 3685, Public Resources Code. Reference: Sections 3630-3690, Public Resources Code.

Article 2. Definitions and Standards

§ 1821. Standards.

In implementing Chapter 3.5, the following standards shall be applied by the Supervisor whenever relevant in any determination or order:

(a) “Price of hydrocarbons” shall be the current price as of the date of the petition for:

(1) Crude oil and liquid or liquefied products extracted and sold from wet gas, the average posted price for crude oil and like products of the same gravity in the field of which the unit area is a part, or if none, in the nearest field;

(2) Residue dry gas, the average price in the field in which the unit area is located. In the event there are no relevant posted prices or a dry gas price, all relevant data shall be considered.

(b) “Reasonable value of the use of the surface” as used in Public Resources Code Section 3648 shall be deemed to be fair rental value. The amount stipulated in the unit agreement shall be accepted as the fair rental value for any parcel for which royalty owners have signed the agreement. For those royalty owners included by an order by the Supervisor, the fair rental value shall be determined by the Supervisor.

(c) “Present worth value” as used in Public Resources Code Section 3643(d) shall be determined by using a discount rate equal to two percent above the generally prevailing prime rate charged by three major banks in the district in which the field of which the unit area is a part as of the date of the filing of the petition.

(d) The “reasonable interest charge” provided for in Public Resources Code Section 3646(b) shall not exceed two percent above the generally prevailing prime rate charged by major banks in the metropolitan area nearest the field of which the unit area is a part as of the first day of January and the first day of July of each year.

(e) Upon a petition of a person for carrying or otherwise financing made pursuant to Section 3646(b), the Supervisor shall order a committee to review the matter and submit a report. The committee shall be made up of one person nominated by the petitioner, one person nominated by the unit operator and one person chosen by the other two nominees, or in the event of disagreement between such two nominees as to the selection of the third person, one person chosen by the Supervisor. The committee shall review all data and submit a report and recommendation to the Supervisor as to (1) whether the petitioner is unable to meet his or her financial obligations in connection with unit operations; and (2) a program and plan for carrying or otherwise financing the petition, including but not limited to source of money, recommended interest rate and source of funds for repayment including future production from the petitioner's tract or tracts.

(f) Under Section 3646(b) of the Public Resources Code, the provisions for carrying or otherwise financing persons who request the same and are determined by the Supervisor to be unable to meet their obligations in connection with the unit operations, shall be met in one of the following methods:

(1) By one or more of the working interests.

(2) By the unit operator.

(g) The tract share or tract assignment of hydrocarbon production shall be determined by calculating the estimated economic production using good oil field practices and prudent engineering.

Authority: Section 3685, Public Resources Code. Reference: Sections 3643(d), 3644, 3646(b), 3648 and 3652, Public Resources Code.

Article 3. Fees and Costs

§ 1830. Fees.

Upon filing a petition pursuant to this subchapter, the petitioner shall pay to the Supervisor the fees set forth in this section. The Supervisor may defer payment of a filing fee after a showing of good cause by the petitioner, but in no event shall payment be deferred beyond the effective date of the Supervisor's order under Sections 3645, 3649, or 3651 of the Public Resources Code.

(a) For any petition for approval of a unit agreement, the fee shall be $3,500.00.

(b) For any other petition, the fee shall be $2,500.00.

Authority: Section 3685, Public Resources Code. Reference: Section 3685, Public Resources Code.

§ 1831. Costs.

(a) After the filing of a petition, and from time to time as the Supervisor finds necessary, the Supervisor may issue orders requiring the deposit of funds with the Supervisor to cover the actual or estimated costs incurred by the State in the administration of Chapter 3.5 of Division 3 of the Public Resources Code or this subchapter.

(b) Within 5 working days after issuance of an order by the Supervisor pursuant to subsection (a), the petitioner shall make the required deposit. For a petition requesting the Supervisor's review and decision pursuant to Section 3653 of the Public Resources Code, all costs paid by the petitioner shall be reimbursed by the unit operator if the Supervisor upholds the position of the petitioner.

(c) Any excess funds deposited with the Supervisor shall be refunded after final disposition of the petition.

Authority: Section 3685, Public Resources Code. Reference: Section 3685, Public Resources Code.

§ 1832. Failure to Pay.

The Supervisor may dismiss the petition if the petitioner fails to pay a filing fee or deposit funds pursuant to an order of the Supervisor.

Authority: Section 3685, Public Resources Code. Reference: Section 3685, Public Resources Code.

Article 5. Petitions

§ 1850. Requests for Action.

(a) Requests for action of the Supervisor pursuant to Sections 3642, 3646(b), 3649, 3650, or 3653 of the Public Resources Code shall be made by filing a petition as provided in this article.

(b) A petition shall be signed by the petitioner and filed, together with 5 copies, with the district deputy of the district in which the unit area is located.
Authority: Section 3685, Public Resources Code. Reference: Sections 3642, 3646(b), 3649, 3650 and 3653, Public Resources Code.

§ 1853. Contents of Petition Requesting Approval of Unit Agreement.
In addition to the information required by Section 3653.5 of the Public Resources Code, a petition requesting approval of a unit agreement shall contain:

(a) The names and addresses of all persons listed in the records of the county tax assessor as having an interest in the lands included in the proposed unit area.

(b) A certified copy of the resolution of the State Lands Commission approving the unit agreement in those cases where lands under the jurisdiction of the commission are in the proposed unit area.
Authority: Section 3685, Public Resources Code. Reference: Sections 3643(h) and 3653.5, Public Resources Code.

§ 1854. Contents of Petition Requesting Approval of Modification of Unit Agreement.
A petition requesting approval of a proposed modification of a unit agreement previously approved by the Supervisor shall contain:

(a) A copy of the unit agreement and the proposed modification.

(b) A report, accompanied by appropriate data, which establishes that the proposed modification qualifies for approval pursuant to Section 3649 of the Public Resources Code.

(c) The names and addresses of all persons listed in the records of the county tax assessor as having an interest in the lands affected by the proposed modification.

(d) A certified copy of the resolution of the State Lands Commission approving the proposed modification of the unit agreement in those cases where lands under the jurisdiction of the commission are affected by the proposed modification.
Authority: Section 3685, Public Resources Code. Reference: Section 3649, Public Resources Code.

§ 1855. Contents of Petition Requesting Approval of Additions to Unit Area.
A petition requesting the addition of a tract or tracts of land to the unit area of the unit agreement previously approved by the Supervisor shall contain or have attached to it:

(a) A copy of the unit agreement and a description of the lands proposed to be added.

(b) A report, accompanied by appropriate data, which establishes that the request qualifies for approval pursuant to Section 3650 of the Public Resources Code.

(c) A recommendation, supported by data and calculations, of the appropriate allocation of unit production within the meaning of Section 3652 of the Public Resources Code.

(d) The names and addresses of all persons listed in the records of the county tax assessor as having an interest in the lands affected by the proposed addition.

(e) A certified copy of the resolution of the State Lands Commission approving the addition to the unit area of any lands under the jurisdiction of the commission.

Authority: Section 3685, Public Resources Code. Reference: Section 3650, Public Resources Code.

§ 1856. Resolution of Disagreement over Unit Operations.

A petition requesting review and decision by the Supervisor of a disagreement with respect to unit operations and each copy shall contain:

(a) A copy of the unit agreement and any applicable unit operating agreement.

(b) A report, accompanied by appropriate data, specifying in detail the nature of the disagreement.

(c) A recommended resolution of the disagreement, accompanied by supporting data and calculations.

(d) The names and addresses of all working interest owners in the unit, and all persons listed in the records of the county tax assessor as having an interest in the lands included in the unit area.

Authority: Section 3685, Public Resources Code. Reference: Section 3653, Public Resources Code.

§ 1857. Determination of Inability to Meet Financial Obligations.

A petition requesting the Supervisor to determine that the petitioner is unable to meet his or her financial obligations in connection with unit operations shall contain:

(a) A description of the petitioner's interest in the unit.

(b) A complete financial statement establishing that the petitioner is unable to meet his or her financial obligations in connection with the unit operations.

(c) The name and address of petitioner's nominee for the committee provided in Section 1821(e) of this subchapter.

(d) A statement of the petitioner's preferences, if any, as to the source of repayment, including any production that may be used as a source of repayment.

(e) A declaration that a copy of the petition has been sent to the unit operator.

Authority: Section 3685, Public Resources Code. Reference: Section 3646(b), Public Resources Code.

§ 1858. Additional Data.

The Supervisor may request additional data with regard to any petition, and that data shall be submitted by the petitioner or the unit operator within 30 days of the request. Failure to comply with the request may result in the dismissal of the petition.

Authority: Section 3685, Public Resources Code. Reference: Sections 3642, 3646(b), 3649, 3650 and 3653, Public Resources Code.

Article 6. Hearings

§ 1863. Time and Place for Public Hearings.

(a) A public hearing shall be held no later than 45 days after the date the petition was filed. If a request for additional data has been made by the Supervisor pursuant to Section 1858 of this subchapter, the hearing shall be held no later than 75 days after the petition was filed.

(b) Public hearings shall be held at a convenient place within the district in which the unit area is located.

Authority: Section 3685, Public Resources Code. Reference: Sections 3643, 3649 and 3650, Public Resources Code.

§ 1864. Notice.

(a) Written notice of all public hearings shall:

(1) Be sent by regular mail to those persons and entities designated in Section 3659 of the Public Resources Code and to all persons whose names and addresses have been provided in the petition.

(b) The notice shall state the time, place, and purpose of the hearing and that written or oral evidence shall be received at the hearing.

(c) The notices shall be sent no less than ten days prior to the date set for the public hearing.

Authority: Section 3685, Public Resources Code. Reference: Section 3659, Public Resources Code.

§ 1865. Hearing Procedures.

(a) All petitions shall be heard by the Supervisor or by a deputy designated by the Supervisor.

(b) The Supervisor or the designated deputy shall determine the manner in which the hearing shall be conducted and the form and content in which evidence may be presented.

(c) Within 60 days after the close of the hearing, the Supervisor shall issue a written order granting or denying the petition in whole or in part. The written order shall state the facts upon which the Supervisor bases his or her decision and the reasons for the decision.

Authority: Section 3685, Public Resources Code. Reference: Sections 3643, 3645, 3646, 3649, 3650, 3651 and 3652, Public Resources Code.

Article 8. Offers to Sell

§ 1881. Notice of Offer to Sell.

(a) An offer of sale pursuant to Section 3647 of the Public Resources Code shall be made by filing a written notice of the offer to sell the interest with the district deputy of the district in which the unit area is located. The notice shall contain:

(1) An identification of the approved unit agreement.

(2) A description of the tract offered for sale.

(3) An identification of the oil and gas interest offered for sale, such as a royalty interest or working interest, together with a reference to any specific lease or contract giving rise to that interest, if applicable.

(4) The address where the offeror may receive any notices and communications concerning the offer.

(5) The price asked.

(b) Within five working days after receipt in the district office of the notice provided in subsection (a) of this section, the Supervisor shall send by regular mail copies of that notice to the unit operator and all working interest owners who have consented to the unit agreement.
Authority: Section 3685, Public Resources Code. Reference: Section 3647, Public Resources Code.

§ 1881.5. Notice of Intention to Purchase.

(a) Any working interest owner who desires to participate in the purchase of the offered interest shall file a notice of intention to purchase with the district deputy of the district in which the offered interest is located and shall give written notice thereof to the offeror on or before a date specified by the Supervisor, which shall be no later than 30 days after the date the notice of offer of sale is filed pursuant to Section 1881(a) of this subchapter.

(b) Negotiations toward the consummation of the purchase of the offeror's interest shall be undertaken in good faith by the offeror and by those working interest owners filing the notice of intention to purchase. Those negotiations shall be concluded on or before a date specified by the Supervisor, which shall be no later than 60 days after the date the notice of offer of sale is filed under Section 1881(a) of this subchapter.

(c) If the purchase price is agreed upon prior to the date specified in subsection (b) of this section, the offeror shall notify the Supervisor immediately in writing, and the parties shall proceed expeditiously to finalize the sale agreement. The sale agreement shall be promptly filed with the Supervisor and in no event shall be filed more than 15 days after written notice of the agreed price is given to the Supervisor.
Authority: Section 3685, Public Resources Code. Reference: Section 3647, Public Resources Code.

§ 1882. Disagreements as to Price.

(a) If the parties fail to agree upon the purchase price for the offered interest within the time specified in Section 1881.5(b) of this subchapter, either party may invoke the arbitration provisions of Section 3647 of the Public Resources Code, and such arbitration shall be governed by the procedures described therein and in this section.

(b) The person or persons electing arbitration shall file notice of the election in writing to the Supervisor within 5 calendar days of the expiration of the negotiation period provided in Section 1881.5(b) of this subchapter.

(c) Upon receipt of the notice provided in subsection (b) of this section, the Supervisor shall:

(1) Authorize the creation of an arbitration committee and direct that the committee act in accordance with the provisions of Section 3647 of the Public Resources Code.

(2) Designate one committee member to act as chairperson and direct the committee to make an independent appraisal of the interest offered for sale.

(3) Fix a date no later than 60 days after the date of receipt of the notice under subsection (b) of this section on or prior to which the committee shall submit to the Supervisor its determination of the fair market value of the interest offered for sale and a report summarizing the basis for that value. Such 60-day period may be extended by the Supervisor for one additional period of 30 days.

(d) Notice of the Supervisor's action under subsection (c) of this section shall be sent to the parties and the unit operator.

(e) Upon receipt of the determination of the fair market value and the report of the committee, the Supervisor shall send to the parties and the unit operator notice of the price at which the offered interest shall be purchased. Subject to the provisions for judicial review contained in Section 3647 of the Public Resources Code, the parties shall finalize the sale agreement and shall file the sale agreement with the Supervisor within 15 days after receipt of the Supervisor's notice of the price.

Authority: Section 3685, Public Resources Code. Reference: Section 3647, Public Resources Code.

§ 1883. Final Orders of the Supervisor.

Authority: Section 3685, Public Resources Code.

Subchapter 4. State-wide Geothermal Regulations

Article 1. General

§ 1900. Purpose.

It is the purpose of this subchapter to set forth the rules and regulations governing the geothermal regulation program of the Division of Oil, Gas, and Geothermal Resources as provided for by Chapter 4 (Sections 3700-3776), Division 3, of the Public Resources Code.

Authority: Sections 3700 through 3776, Public Resources Code.

§ 1911. Scope of Regulations.

These regulations shall be statewide in application.

§ 1914. Approval.

The approval of the Supervisor is required prior to commencing drilling, deepening, redrilling, or plugging and abandonment operations. The written approval shall list any and all requirements of the Division. In an emergency, the Supervisor or a designee may give verbal approval to the operator to start any operations covered by these regulations, provided the operator sends the Division a written notice of the emergency operations conducted within 5 days after receiving the verbal approval.

Authority: Section 3714, Public Resources Code. Reference: Sections 3712, 3714, and 3724, Public Resources Code.

Article 2. Definitions

§ 1920.1. Definitions.

(a) “Observation Well” means a well drilled strictly for monitoring purposes.

(b) “Exploratory Geothermal Well” means a well other than a development well drilled to discover or evaluate the presence of either low-temperature or high-temperature geothermal fluids, including steam, where the surface location of the well is at least .8 km or one-half mile from the surface location of an existing well capable of producing geothermal fluids in commercial quantities.

(c) “Development Well” means a well, other than an exploratory well, drilled for the purpose of producing either high-temperature or low-temperature geothermal fluids in commercial quantities.

(d) “Abandoned Well” means a well the Supervisor so designates after it has been demonstrated that all steps have been taken to protect underground or surface water suitable for irrigation or other domestic uses from the infiltration or addition of any detrimental substance, and to prevent the escape of all fluids to the surface.

(e) “Injection Well” is a service well drilled or converted for the purpose of injecting fluids.

(f) “High-Temperature Geothermal Fluid” means a naturally heated subterranean fluid with a surface temperature equal to or higher than the boiling point of water.

(g) “High-Temperature Well” means a well drilled to discover, evaluate, produce, or utilize high-temperature geothermal fluids.

(h) “High-Temperature Geothermal Field” means an area so designated by the Supervisor for administrative purposes. The area shall contain at least one well capable of producing high-temperature geothermal fluids in commercial quantities.

(i) “Low-Temperature Geothermal Fluid” means naturally heated subterranean fluid with a surface temperature below the boiling point of water at ambient atmospheric pressure.

(j) “Low-Temperature Geothermal Well” means a well drilled to discover, evaluate, produce, or utilize low-temperature geothermal fluids where the fluids will be used for their heat value.

(k) “Low-Temperature Geothermal Field” means an area the Supervisor so designates for administrative purposes. The area shall contain at least one well capable of producing low-temperature geothermal fluids in commercial quantities.

(l) “Idle Well” means a well, other than a suspended well, that has not been officially plugged and abandoned, on which the operator has ceased all activity, including but not limited to drilling, production or injection.

(m) “Production Tested” means a well that the operator has tested for temperature, flow rate, and pressure.

(n) “A well capable of producing geothermal fluid in commercial quantities” means a well:

(1) Supplying geothermal fluid to an existing power plant or other facility for the purpose of generating electricity; or

(2) Production tested and scheduled to supply geothermal fluid to a power plant or other facility for the purpose of generating electricity for which:

(A) An application is pending before the California Energy Commission or the California Public Utilities Commission; or

(B) The California Energy Commission or California Public Utilities Commission has approved a site; or

(C) A contract has been executed between the supplier and a user and conditions have been fulfilled that commit the user to build a facility; or

(3) Supplying geothermal fluid or completed and scheduled to supply geothermal fluid to facilities existing, under construction, or committed for construction, for any nonelectric use of geothermal resources, including but not limited to space heating or food processing; or

(4) Production tested and, in the operator's opinion, able to supply sufficient geothermal energy to justify construction of a facility to utilize the energy, and designated capable of production by the Supervisor; or

(5) Production tested and found by the Supervisor, after a public hearing, to be capable of producing sufficient geothermal energy to be a commercially viable geothermal development project.

(o) “Usable Thermal Energy” means the usable heat energy contained in geothermal fluid, expressed in British Thermal Units or gigajoules.

(p) “Notice” means an application for permission to do work on a well.

(q) “Drilling Log” means the recorded description of the lithologic sequence encountered while drilling a well.

(r) “Drilling Operations” means the actual drilling or redrilling of a well for exploration, production, observation, or injection, including the running and cementing of casing and the installation of wellhead equipment. “Drilling Operations” do not include perforating, logging, or related operations after all the casing has been cemented.

(s) “Suspension” means the status assigned to a well that is temporarily abandoned pursuant to specified plugging requirements that are selected by the Division from the plugging and abandonment requirements contained in Sections 1980, 1981, 1981.1, and 1981.2 of this subchapter, and the operations necessary to cause temporary abandonment have been carried out by the operator and approved by the Division.

(t) With respect to well depth:

(1) “Shallow” means deeper than 25 feet (about 8 meters) but no deeper than 250 feet (about 76 meters);

(2) “Intermediate” means deeper than 250 feet (about 76 meters) but no deeper than 1,000 feet (about 305 meters);

(3) “Deep” means deeper than 1,000 feet (about 305 meters).

(u) “BOPE” is an acronym for blowout prevention equipment.

(v) “Mineral Extraction Well” means a well drilled, converted, or reworked for the purpose of discovering, evaluating, or producing minerals or other products in solution from naturally heated subterranean fluids. A low- or high-temperature geothermal well may also be a mineral extraction well.

Authority: Sections 3712 and 3714, Public Resources Code. Reference: Section 3714, Public Resources Code.

§ 1920.2. Field Designation.
The Supervisor may designate geothermal fields for administrative purposes. A field shall contain at least one well capable of producing geothermal resources in commercial quantities. The Supervisor shall establish the boundaries by graphically constructing a one-mile square around each well capable of producing geothermal resources in commercial quantities. Each such well shall be at the center of a square.
Authority: Section 3714, Public Resources Code. Reference: Section 3712, Public Resources Code.

§ 1920.3. Field Rules.
When sufficient geologic and engineering information is available, the Supervisor may adopt or amend existing field rules for any geothermal resource field or area. Before adopting or amending field rules, the Supervisor shall notify affected persons, including but not limited to operators, landowners, and any utilities or other commercial users, and allow at least 30 days for them to comment on the proposed rules. The Supervisor shall notify affected persons in writing of the adoption of the rules.
Authority: Section 3714, Public Resources Code. Reference: Section 3712, Public Resources Code.

Article 3. Drilling

§ 1930. General.
All wells shall be drilled in such a manner as to protect or minimize damage to the environment, usable ground waters (if any), geothermal resources, life, health and property.

§ 1931. Notice of Intention to Drill.
Before an owner or operator can commence drilling a well, a Notice of Intention to Drill must be filed on a Division form (OGG105-11/93) and submitted to the Division, accompanied by the appropriate fee and bond (see Section 1932). The operator shall not commence drilling until the Division approves the Notice of Intention to Drill. The Notice shall include all information required on the Division form, and the following:

(a) A map showing the parcel boundaries and the location of the proposed well.

(b) If a government agency has prepared an environmental document for the proposed well, the name and address of the agency or a copy of the final environmental documents.

If operations on an exploratory well or observation well for which the Division is required to prepare environmental documents have not commenced within two years from the date the Notice of Intention to Drill was approved, the Division shall cancel the notice unless, prior to the expiration date, the operator requests an extension on a Rework/Supplementary Notice.

If operations on a development well, exploratory well, or observation well for which the Division is not required to prepare environmental documents have not commenced one year from the date the notice is approved, the Division shall cancel the notice unless, prior to the expiration date, the operator requests a time extension on a Rework/Supplementary Notice. The Division may extend these time limits at its discretion.

(c) Such other information as the Supervisor may require.

Authority: Sections 3712 and 3714, Public Resources Code. Reference: Sections 3712, 3724, and 3724.1, Public Resources Code.

§ 1931.1. Rework/Supplementary Notice.

If there is any change in the original Notice of Intention, or if the operator plans to deepen, redrill, plug, or perform any operation that will permanently alter the well casing, a Rework/Supplementary Notice must be filed with the Division. A fee and/or bond may be required if, for example, the proposal concerns entering a plugged and abandoned or suspended well.

If the drilling operations the Division approved on a Rework/Supplementary Notice have not commenced one year from the date the notice is approved, the Division shall cancel the notice unless, prior to the expiration date, the operator requests a time extension on a Rework/Supplementary Notice. The Division may extend this time limit at its discretion.

Authority: Section 3714, Public Resources Code. Reference: Sections 3712 and 3724, Public Resources Code.

§ 1931.2. Notice to Convert to Injection.

An operator planning to convert an existing well to an injection or disposal well, even if there will be no change in mechanical condition, must file a Rework/Supplementary Notice with the Division and the Division must approve the notice before injection is commenced.

Authority: Section 3714, Public Resources Code. Reference: Sections 3712 and 3724, Public Resources Code.

§ 1931.5. Unstable Terrain.

If the construction of drilling sites, roads, sumps, steam transmission lines, and other construction attendant to geothermal operations could cause or could be affected by slumping, landslides, or unstable earth conditions, the Supervisor shall require that the operator submit a written analysis of the proposed work prior to the commencement of any construction and prior to approving a permit to drill. At the request of the Supervisor, the report shall be prepared by a civil engineer, licensed in the state and experienced in soils engineering; and if slumping or landsliding could be involved, the requested report shall also be prepared by an engineering geologist, certified in the state and experienced in slope stability and related problems. No permit to drill shall be approved unless the report indicates that the work is planned in such a manner as to reasonably mitigate the problem throughout the life of the project.

Upon completion of any construction authorized by the Supervisor pursuant to this section, the operator shall certify in writing to the Supervisor that the work was carried out according to the approved plans subject only to changes approved by the Supervisor.

§ 1932. Fees.

The appropriate fee, as listed below, shall be paid when the Notice of Intention to Drill is filed. (Refer to Section 1920.1 for definitions of terms and depth limitations.)

(a) $25 Fee.

(1) Shallow low-temperature geothermal well.

(2) Shallow observation well.

(b) $200 Fee.

(1) Shallow observation well program of up to and including 25 such wells (except as provided in PRC Section 3724.1).

(2) Intermediate depth low-temperature geothermal well.

(3) Intermediate depth observation well.

(c) $500 Fee.

(1) Intermediate depth observation well program of up to and including 5 such wells.

(2) Development well, other than low-temperature, to any depth.

(3) Deep low-temperature geothermal well.

(4) Injection well.

(5) Deep observation well.

(d) $1,000 Fee. Exploratory well, other than low-temperature, to any depth.

(e) If a Notice of Intention to Drill is cancelled, the Division shall refund the fee paid by the operator, minus the Division's administrative costs for processing and reviewing the notice.

Authority: Sections 3712 and 3714, Public Resources Code. Reference: Sections 3724 and 3724.1, Public Resources Code.

§ 1933. Statewide Fee-Assessment Date.

June 15 of each year is established as the statewide fee-assessment date. Assessments for all geothermal operators shall be annually fixed on or before June 15. The funds provided by fees are for the supervision of geothermal resource wells during the fiscal year following the statewide fee-assessment date.

Authority: Section 3724.5, Public Resources Code. Reference: Section 3724.5, Public Resources Code.

§ 1933.1. Establishment of Annual Well Fees.

To establish the annual fee that must be charged to each geothermal well operator, the department, on or before the statewide fee-assessment date shall:

(a) Make an estimate of the sum of the well drilling fees that will be filed by operators during the fiscal year following the fee assessment date.

(b) Establish the appropriation for the supervision of geothermal resource wells from the amount proposed in the Governor's Budget. The appropriation shall be adjusted by any changes that have occurred during the legislative review process.

(c) Establish the estimated surplus or deficit from the current and prior fiscal year by calculating the cost of the supervision of geothermal resource wells and the actual revenues therefrom.

(d) Estimate the amount assessable to geothermal operators by taking the appropriation amount (paragraph b), deducting the well drilling fees (paragraph a), and adding or deducting the current year and prior year adjustments (paragraph c).

(e) Determine the total number of chargeable wells by identifying the total number of producing, service, and idle wells that existed at any time during the preceding calendar year in the state. A well that has changed ownership one or more times during the preceding calendar year shall be counted only once, and assignment of charges shall be made to the operator of record on December 31 of that year. “Chargeable wells” shall not include:

(1) Any well used for observation purposes.

(2) Any well for which the Supervisor has approved a suspension. However, a well must be suspended for the entire calendar year to be nonchargeable.

(3) Any low-temperature well.

(f) Determine the annual well fee by dividing the amount assessable by the total number of chargeable wells.

(g) Determine the amount to be charged to each operator by multiplying the total number of chargeable wells of record on the previous December 31 by the annual well fee.

Authority: Section 3724.5, Public Resources Code. Reference: Sections 3724, 3724.1 and 3724.5, Public Resources Code.

§ 1933.2. Notification of Assessment.

On or before June 15 of each year, the Department shall notify each operator of that operator's assessment. If an operator believes an error has been made, the operator shall notify the Supervisor of the Division on or before July 1 following the notification of assessment.

Authority: Section 3724.5, Public Resources Code. Reference: Section 3724.5, Public Resources Code.

§ 1933.3. Establishment and Certification of Assessment Roll.

(a) The Director of the Department shall create an Annual Assessment Roll as of July 1 of each year. The assessment roll shall be comprised of the name of each operator, a billing address, the number of chargeable wells as identified by the provisions of Section 1933.1(e) of this subchapter, and the amount charged.

(b) On or before July 1, the Director shall transmit the roll to the State Controller, together with a certification stating that appeals have (or have not) been adjudicated and the assessment roll contains the true and correct amounts to be assessed to each operator.

(c) The Director shall keep on file and have available for public inspection during regular office hours, a listing of the chargeable wells by operator.

Authority: Section 3724.5, Public Resources Code. Reference: Section 3724.5, Public Resources Code.

§ 1933.4. Payments and Penalties.

(a) The charges levied and assessed are due and payable to the State Treasurer on the first of July of each year.

One-half of the charges shall be delinquent if not paid on or before August 15th of each year. The remaining one-half of the charges shall be delinquent if not paid on or before the first of February of the following year.

(b) Any person who fails to pay any charge within the time required shall pay a penalty of 10 percent of the amount due, plus interest on the charge due at the rate of 1 1/2% per month, or fraction thereof, computed from the delinquent date of the assessment until and including the date of payment.

(c) Any person who fails to pay any charge or penalty shall be subjected to the provisions of Sections 3772-3775 of the Public Resources Code.

Authority: Section 3724.5, Public Resources Code. Reference: Sections 3724.5 and 3724.6, Public Resources Code.

§ 1935. Casing Requirements.

All wells shall be cased in such a manner as to protect or minimize damage to the environment, usable ground waters and surface waters (if any), geothermal resources, life, health and property. The permanent wellhead completion equipment shall be attached to the production casing or to the intermediate casing if production casing does not reach to the surface. Division specifications for casing strings shall be determined on a well-to-well basis. All casing strings reaching the surface shall provide adequate anchorage for blowout-prevention equipment, hole pressure control and protection for all natural resources. The following casing requirements are general but should be used as guidelines in submitting proposals to drill.

§ 1935.1. Conductor Pipe.

Conductor pipe shall be cemented with sufficient cement to fill the annular space from the shoe to the surface. An annular blowout preventer, or its equivalent, approved by the Division, shall be installed on conductor pipe for exploratory wells and development wells when deemed necessary by the Division. The Division may waive this requirement for low-temperature geothermal wells.

Authority: Section 3714, Public Resources Code. Reference: Sections 3739 and 3740, Public Resources Code.

§ 1935.2. Surface Casing.

Surface casing shall provide for control of formation fluids, for protection of shallow usable groundwater, and for adequate anchorage for blowout prevention equipment. All surface casing shall be cemented with sufficient cement to fill the annular space from the shoe to the surface.

The following requirements may be modified or waived by the Division for low-temperature geothermal wells.

(a) Length of Surface Casing.

(1) In areas where subsurface geological conditions are variable or unknown, surface casing in general shall be set at a depth equaling or exceeding 10 percent of the proposed total depths of wells drilled in such areas. A minimum of 60 meters (about 200 feet) and a maximum of 400 meters (about 1,300 feet) of surface casing shall be set.

(2) In areas of known high formation pressure, surface casing shall be set at a depth determined by the Division after a careful study of geological conditions.

(3) Within the confines of designated geothermal fields, the depth at which surface casing shall be set shall be determined by the Division on the basis of known field conditions.

(b) Cementing Point for Surface Casing.

Surface casing shall be cemented through a sufficient series of low permeability, competent lithologic units (such as claystone or siltstone) to ensure a solid anchor for blowout prevention equipment and to protect usable groundwater and surface water from contamination. A second string of surface casing may be required if the first string has not been cemented through a sufficient series of low permeability, competent lithologic units, and either a rapidly increasing thermal gradient or rapidly increasing formation pressures are encountered.

(c) Drilling Fluid Return Temperatures. The temperature of the return drilling fluid shall be monitored continuously during the drilling of the surface casing hole. Either a continuous temperature monitoring device shall be installed and maintained in working condition, or the temperature shall be read manually. In either case, return drilling fluid temperatures shall be entered into the log book after each joint of pipe has been drilled down (every 10 meters, about 30 feet).

Authority: Section 3714, Public Resources Code. Reference: Sections 3739 and 3740, Public Resources Code.

§ 1935.3. Intermediate Casing.

Intermediate casing shall be required for protection against anomalous pressure zones, cave-ins, washouts, abnormal temperature zones, uncontrollable lost circulation zones or other drilling hazards. Intermediate casing strings shall be, if possible, cemented solid to the surface.

§ 1935.4. Production Casing.

Production casing may be set above or through the producing or injection zone and cemented above the objective zones. Sufficient cement shall be used to exclude overlying formation fluids from the zone, to segregate zones, and to prevent movement of fluids behind the casing into zones that contain usable groundwater. Production casing shall either be cemented with sufficient cement to fill the annular space from the shoe to the surface or lapped into intermediate casing, if run. Production casing lapped into an intermediate string, shall overlap at least 15 meters (about 50 feet); the lap shall be cemented solidly; and shall be pressure tested to ensure its integrity.

Authority: Section 3714, Public Resources Code. Reference: Sections 3739 and 3740, Public Resources Code.

§ 1936. Electric Logging.

All wells, except observation wells and low-temperature thermal wells, shall be logged with an induction electrical log, or equivalent, from total depth to the bottom of the conductor pipe, except in the case where air is used as the drilling medium. This requirement may be waived by the Supervisor and may vary depending on geologic conditions as stated in Section 1935.2(a)(2).

§ 1937.1. Records Required to Be Filed with the Division.

(a) Drilling Log and Core Record. The drilling log shall show the lithologic characteristics and depths of formations encountered, the depths and temperatures of water-bearing and steam-bearing strata, the temperatures, chemical compositions, and other chemical and physical characteristics of fluids encountered from time to time, so far as ascertained.

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

(b) Well History. The history shall describe in detail in chronological order on a daily basis all significant operations carried out and equipment used during all phases of drilling, testing, completion, recompletion and plugging and abandonment of the well.

(c) Well Summary Report. The well summary report shall accompany the core record and well history reports. It is designed to show data pertinent to the condition of a well at the time of completion of work done.

(d) Production Records. Monthly production records shall be filed with the Division on or before the 30th day of each month, for the last preceding calendar month.

(e) Injection Records. Monthly injection records shall be filed with the Division on or before the 30th day of each month, for the last preceding calendar month.

(f) Other Records. The following shall also be filed with the Division, if run: electric logs, physical or chemical logs, tests, water analyses, and surveys (including temperature surveys and directional surveys).

Article 4. Blowout Prevention

§ 1941. General.

Blowout-Prevention Equipment (BOPE) installations shall include high temperature-rated packing units and ram rubbers, if available, and shall have a minimum working-pressure rating equal to or greater than the lesser of:

(a) A pressure equal to the product of the depth of the BOPE anchor string in meters times 0.2 bar per meter. (Feet times one (1) psi per foot)

(b) A pressure equal to the rated burst pressure of the BOPE anchor string.

(c) A pressure equal to 138 bars (2,000 psi).
Specific inspections and tests of the BOPE shall be made by the Division. The requirements for such tests will be included in the Division's answer to the notice of intention to drill.

§ 1942. BOPE Guide.
The Division shall prepare a guide for establishing the blowout prevention equipment requirements specified in the Division's approval of proposed operations.
Authority: Section 3714, Public Resources Code. Reference: Section 3739, Public Resources Code.

§ 1942.1. Unstable Areas.
Drilling any wells, including water wells, is prohibited in areas containing fumaroles, geysers, hot springs, mud pots, etc. (unstable areas), unless the Division determines, after a thorough geological investigation, that drilling in an unstable area is feasible. In this case, a special permit may be issued. The following may be required for a well drilled in an unstable area:

(a) A Division engineer shall be present at the well at all times during the initial phases of drilling until the surface casing has been cemented and the BOPE has been pressure-tested satisfactorily. The Division engineer may observe all drilling operations at the well and if, in his or her opinion, conditions warrant, may order a second or third string of surface casing to be run.

(b) The operator, while drilling the surface casing hole, shall continuously monitor and record the following:

(1) Drilling fluid temperature (in and out),
(2) Drilling fluid pit level,
(3) Drilling fluid pump volume,
(4) Drilling fluid weight, and
(5) Drilling rate.

(c) A drilling fee in addition to the fee specified in Section 1932, up to the maximum of $1,000 per well, depending on the geologic conditions in the area.
Authority: Section 3714, Public Resources Code. Reference: Sections 3724, 3739, 3740, and 3741, Public Resources Code.

§ 1942.2. Cable Tool Drilling.
This method of drilling, or any other method of drilling, will be allowed, at the discretion of the Supervisor, with certain stipulations in the following cases only:

(a) Areas where formation pressures are known to be hydrostatic and are known to contain geothermal fluids at shallow depths, and where down-hole temperatures are less than 100° C (212° F).

(b) Areas where geothermal fluids have been produced from shallow wells, less than 150 meters (500 feet) true vertical depth, over a number of years with no known history of a blowout or geyser.

Authority: Section 3714, Public Resources Code. Reference: Sections 3712 and 3715, Public Resources Code.

Article 5. Completion and Production

§ 1950. Official Completion.

A well is considered to be completed 30 days after drilling operations have ceased and the well is capable of producing a geothermal resource, or 30 days after the well has commenced to produce a geothermal resource, unless drilling operations are resumed before the end of the 30-day period.

Authority: Section 3714, Public Resources Code. Reference: Section 3737, Public Resources Code.

§ 1950.1. Time Limits.

For the purpose of filing drilling records pursuant to Section 3735, Public Resources Code, the 60 day time limit for filing such records shall begin when the Division determines that a well is completed, idle, or plugged and abandoned.

Authority: Section 3714, Public Resources Code. Reference: Section 3735, Public Resources Code.

§ 1952. Maintenance.

All wellheads, separators, pumps, mufflers, manifolds, valves, pipelines and other equipment used for the production of geothermal resources, shall be maintained in good condition in order to prevent loss of or damage to life, health, property and natural resources.

§ 1953. Corrosion.

All surface wellhead equipment and pipelines and subsurface casing and tubing will be subject to periodic corrosion surveillance in order to safeguard life, health, property and natural resources.

§ 1954. Tests.

(a) Requirements. The Supervisor shall require such tests or remedial work as in his or her judgment are necessary to prevent damage to life, health, property, and natural resources, to protect geothermal reservoirs from damage or to prevent the infiltration of detrimental substances into underground or surface water suitable for agricultural, industrial, municipal, or domestic purposes, to the best interest of the neighboring property owners and the public.

(b) Types of Tests.

(1) Casing Tests

(A) Spinner surveys

(B) Wall thickness

(C) Lap

(D) Pressure

(E) Radioactive tracer surveys

(2) Cementing Tests

(A) Cementing of casing

(B) Pumping of plugs

(C) Hardness of plugs

(D) Depths of plugs

(3) Equipment Tests

(A) Gauges

(B) Thermometers

(C) Surface facilities, lines, vessels, etc.

(D) Blowout-prevention equipment. BOPE inspections and/or tests are normally performed on all drilling wells. The Supervisor requires that the blowout-prevention equipment be tested prior to drilling out the shoe of the surface casing. A Division engineer must be contacted to witness a pressure test of each preventer of the well prior to drilling out the shoe of the surface casing.

Article 6. Injection

§ 1960. Definition.

Injection wells are those used for the disposal of waste fluids, the augmentation of reservoir fluids, pressure maintenance of reservoirs or for any other purpose authorized by the Supervisor. New wells may be drilled and/or old wells may be converted for water injection or disposal service. Notices, bonds and fees are required for drilling or conversion as stated in Article 3.

§ 1961. Projects.

Following is an outline which sets forth the requirements for initiating an injection project. Data and exhibits need only extend or cover the injection zone and zones which will possibly be affected by an injection project:

(a) Letter setting forth the entire plan of operations, which should include:

(1) Reservoir conditions.

(2) Method of injection: through casing, tubing, or tubing with a packer.

(3) Source of injection fluid.

(4) Estimates of daily amount of water to be injected.

(b) Map showing contours on a geologic marker at or near the intended zone of injection.

(c) One or more cross sections showing the wells involved.

(d) Analyses of fluid to be injected and of fluid from intended zone of injection.

(e) Copies of letter or notification sent to neighboring operators if deemed advisable by the Supervisor.

§ 1962. Project Approval.

A written approval of a project will be sent to the operator and such approval will contain those provisions specified by the Division as necessary for safe operations. Injection shall not commence until approval has been obtained from the Division.

§ 1963. Notice to Drill New Well or Convert Existing Well.
Prior to the operator doing work on a well, the appropriate notices must be approved by the Division. Proposals to drill new wells for injection purposes shall be filed on the Division form entitled Notice of Intention to Drill New Well (OGG 105). Proposals to convert existing wells shall be filed on the Division form entitled Rework/Supplementary Notice.

Bonds and fees are required for all proposed wells. The bonds and fees for an injection well are the same as those required for a development well.

Injection wells shall conform to the Division's spacing regulations.
Authority: Section 3714, Public Resources Code. Reference: Sections 3712, 3723, 3724, and 3725, Public Resources Code.

§ 1964. Subsequent Work.
A Rework/Supplementary Notice is required for any subsequent work that alters the well casing(s) or changes the use of the well as provided in Section 1966(f).
Authority: Section 3714, Public Resources Code. Reference: Sections 3724, 3724.2, 3724.3, Public Resources Code.

§ 1966. Surveillance.
(a) Surveillance of waste water disposal or injection projects is necessary on a continuing basis to establish to the satisfaction of the Supervisor that all water is confined to the intended zone of injection.
(b) When an operator proposes to drill an injection well, convert a producing or idle well to an injection well, or rework an injection well and return it to injection service, the operator shall be required to demonstrate complete casing integrity to the Division by means of a specific test.
(c) To establish the integrity of the casing and the annular cement above the shoe of the casing, within 30 days after injection is started into a well, the operator shall make sufficient surveys to demonstrate that all the injected fluid is confined to the intended zone of injection. Thereafter, such surveys shall be made at least every two years, or more often if ordered by the Supervisor or his or her representative. All such surveys shall be witnessed by a Division engineer.
(d) After the well has been placed on injection, a Division inspector shall visit the well site periodically. At these times, surface conditions shall be noted and, if any unsatisfactory conditions exist, the operator shall be notified of required remedial work. If this required work is not performed within 90 days, the approval issued by the Division shall be rescinded. The Supervisor may order that the repair work be done immediately if it is determined that damage is occurring at a rapid rate.

(e) Injection pressures shall be recorded and compared with the pressures reported on the monthly injection reports. Any discrepancies shall be rectified immediately by the operator. A graph of pressures and rates versus time shall be maintained by the operator. Reasons for anomalies shall be promptly ascertained. If these reasons are such that it appears damage is being done, approval by the Division may be rescinded, and injection shall cease.

(f) When an injection well has been idle for two years, the Division may inform the operator, by letter, that approval for use of the well for injection purposes is rescinded. If the operator intends to reclaim the well for injection purposes, a Rework/Supplementary Notice shall be filed proposing to demonstrate by specified tests that the injected fluid will be confined to the intended zone of injection.

Authority: Section 3714, Public Resources Code. Reference: Section 3712, Public Resources Code.

Article 7. Subsidence

§ 1970. Responsibility.

The prime responsibility for subsidence detection and abatement in geothermal areas in the State of California lies with the Division of Oil, Gas, and Geothermal Resources.

§ 1971. Imperial Valley Subsidence Regulations.

(a) Surveys and Bench Marks.

(1) Subsidence bench marks, at wellsites, tied to existing first- and/or second-order networks, are required for all wells that will be tested or produced. These bench marks shall be the responsibility of and at the expense of the operator. Surveys shall precede extensive production testing of the well.

(2) All survey work shall be coordinated with the County Surveyor.

(3) All work shall be done under the direct supervision of a Registered Civil Engineer or Licensed Land Surveyor.

(4) An adequate series of bench marks shall be set as required by the Division and shall be tied to existing survey nets.

(5) All field work, computations, etc., shall conform to National Geodetic Survey (N.G.S.) standards. Refer to “Manual of Geodetic Leveling” (1948).

(6) All surveys shall be second-order or better.

(7) All single-point tie-ins shall be double-run. Survey loops between two points on existing surveys may be single-run.

(8) Equipment shall be equal to or better than that accepted by the N.G.S. for second-order surveys. The N.G.S. procedures shall be followed.

(9) Types of acceptable bench marks are:

(A) Brass rod driven to refusal or 9 meters (about 30 feet) and fitted with an acceptable brass plate.

(B) Permanent structure (head walls, bridges, etc.) with installed plate.

(10) Bench marks at wellsites shall be situated so as to minimize the possibility of being destroyed during any subsequent work-over activity at the wells. Each bench mark shall be well marked so as to be plainly visible to work-over crews.

(11) Between the wellsite and the network, bench marks shall be set at one-half mile intervals or as specified by the Division.

(12) Surveys shall be run annually by and at the expense of the operator while well(s) are being produced unless otherwise specified by the Division.

(13) The adjusted data from all surveys shall be submitted to the Division within 60 days after leveling is completed.

(14) Resurveys of the first- and second-order networks shall be coordinated by the Division.

(b) Reservoir Engineering.

(1) Initial bottom-hole pressures and temperatures (allowing a minimum of one month static time) shall be submitted to the Division within thirty (30) days of completion of work.

(2) All preliminary test data shall be submitted to the Division within 30 days of completion of the tests.

(3) Monthly surface recordings of production, injection, temperature, and pressure shall be reported to the Division on the appropriate forms.

(4) Periodic development and review meetings between operators and the Division shall be required (at least one per year).

Article 8. Plugging and Abandonment

§ 1980. Objectives.

The objectives of abandonment plugging are to block interzonal migration of fluids so as to:

(a) Prevent contamination of the fresh waters or other natural resources.

(b) Prevent damage to geothermal reservoirs.

(c) Prevent loss of reservoir energy.

(d) Protect integrity of reservoirs.

(e) Protect life, health, environment and property.

§ 1981. General Requirements.

The following are general requirements which are subject to review and modification for individual wells or field conditions. The Division may require the witnessing of any or all of the field operations listed below.

(a) Notice of Intention to plug and abandon Geothermal Resources Well, is required for all wells.

(b) History of Geothermal Resources Well shall be filed within 60 days after completion of the plugging and abandonment.

(c) The Division's Report of Well plugging and abandonment, will not be issued until all records have been filed and the site inspected for final cleanup by a Division engineer.

(d) Subsequent to the plugging and abandonment of the hole, all casings shall be cut off at least 2 meters (6 feet) below the surface of the ground, all concrete cellars and other structures shall be removed, and the surface location restored, as near as practicable, to original conditions. The landowner has the option to assume legal responsibility for a well; however, to do so he or she must have legal clearance from the Division.

(e) Good quality, heavy drilling fluid approved by the Supervisor shall be used to replace any water in the hole and to fill all portions of the hole not plugged with cement.

(f) All cement plugs, with the possible exception of the surface plug, shall be pumped into the hole through drill pipe or tubing.

(g) All open annuli shall be filled solid with cement to the surface.

§ 1981.1. Exploratory Well Requirements (No Production Casing).

(a) Base of fresh waters -a minimum of 30 meters (about 100 feet) of cement straddling the interface or transition zone whether behind casing or uncased.

(b) Shoe plug (all casing, including conductor pipe) -straddle with 30 meters (about 100 feet) of cement.

(c) Where the well has been drilled with air, a bridge plug shall be placed at the shoe of the surface casing and the bridge plug shall be capped with at least 60 meters (about 200 feet) of cement.

(d) Surface plug -15 meters (about 50 feet) minimum. May be either neat cement or concrete mix.

§ 1981.2. Cased Wells.

Cased exploratory, uncompleted development, former producing and injection wells.

(a) Geothermal zones -uncased or perforated. Cement plugs shall extend from the bottom of the zone or perforations to 30 meters (about 100 feet) over the top of the zone or perforations.

(b) Liners. Cement plugs shall be placed from 15 meters (about 50 feet) below to 15 meters (about 50 feet) above liner tops.

(c) Casing may be salvaged within protection, if first approved by the Division. A minimum overlap of 15 meters (about 50 feet) is required.

(d) Casing stubs and laps. Cement plugs shall be placed, if possible, from 15 meters (about 50 feet) below to 15 meters (about 50 feet) above top of casing. If unable to enter stub or lap, 30 meters (about 100 feet) of cement shall be placed on the top of the stub or lap.

(e) Fish, collapsed pipe, etc. Cement plugs shall be squeezed, with the use of a retainer or bradenhead, with sufficient cement to fill across the production zone or perforations and to 30 meters (about 100 feet) above the zone or perforations.

(f) Base of fresh waters -a minimum of 30 meters (about 100 feet) of cement straddling the interface or transition zone, whether behind casing or uncased.

(g) Shoe plug (all casing, including conductor pipe) -straddle with 30 meters (about 100 feet) of cement.

(h) Where the well has been drilled with air, a bridge plug shall be placed at the shoe of the surface casing and the bridge plug shall be capped with at least 60 meters (about 200 feet) of cement.

(i) Surface plug -15 meters (about 50 feet) minimum. May be either neat cement or concrete mix.

Subchapter 5. Disclosure and Inspection of Public Records

Article 1. General

§ 1995. Purpose.

The purpose of this subchapter is to set forth the rules and regulations governing the disclosure and inspection of well records on file with the Division of Oil, Gas, and Geothermal Resources as provided for in Sections 3234 and 3752, Division 3 of the Public Resources Code.
Authority: Sections 3013 and 3712, Public Resources Code; and Section 6253(a), Government Code. Reference: Sections 3234(a) and 3752, Public Resources Code.

§ 1995.1. Policy.

The policy of the Division is to make all well records that are open to public inspection readily available to the public. Upon request by any person, identifiable public records shall be made available for inspection and copying as provided for in this subchapter.
Authority: Sections 3013 and 3712, Public Resources Code. Reference: Sections 3234(a) and 3752(a), Public Resources Code; and Sections 6256 and 6257, Government Code.

§ 1995.2. Scope of Regulations.

These regulations shall apply to all records on file at every office of the Division of Oil, Gas, and Geothermal Resources as defined in Section 1996.1 of this subchapter.
Authority: Sections 3013 and 3712, Public Resources Code. Reference: Sections 3234 and 3752, Public Resources Code.

Article 2. Definitions

§ 1996. General.

The following words or terms used in this subchapter, unless otherwise defined, shall have the meaning ascribed to them in this article.
Authority: Sections 3013 and 3712, Public Resources Code. Reference: Sections 3234(a) and 3752(a), Public Resources Code.

§ 1996.1. Records.

"Records" mean all of the well records filed pursuant to Division 3, Chapters 3 or 4 of the Public Resources Code, including production and injection reports of the wells of any owner or operator, except experimental logs, experimental tests, or interpretive data as defined in this article.
Authority: Sections 3013 and 3712, Public Resources Code. Reference: Sections 3234(a) and 3752(a), Public Resources Code.

§ 1996.3. Experimental Log and Experimental Test.
"Experimental log" or "experimental test" means a log or test that is not generally available to all operators, or that is run to evaluate whether such log or test is an effective, workable, and valid engineering or geologic tool. A log or test that is not generally available to all operators is one that is not listed in the pricing schedules, nor offered as a routine service, by established logging companies.
Authority: Sections 3013 and 3712, Public Resources Code. Reference: Sections 3234(d) and 3752(c), Public Resources Code.

§ 1996.4. Interpretive Data.
"Interpretive data" mean geologic and engineering data, from an owner or operator, that are derived from raw data by means of professional study and interpretation.
"Interpretive data" include, but are not limited to: geologic cross sections, subsurface contour maps, surface geologic maps, oil and gas reserve calculations, and paleontologic reports.
Authority: Sections 3013 and 3712, Public Resources Code. Reference: Sections 3234(d) and 3752(c), Public Resources Code.

§ 1996.5. Offshore Well.
"Offshore well" as related to well records means a well that is identified by a specific API numbering system used to classify offshore wells.
Authority: Section 3013, Public Resources Code. Reference: Section 3234(a), Public Resources Code.

§ 1996.6. Well.
"Well" means an original hole, or a subsequent deepening or redrilling thereof, carried out after completion of the original drilling operation. The records of all holes drilled during the course of a single drilling operation or shallow geothermal observation well program shall be considered as records of a single well for purposes of this subchapter.
Authority: Sections 3013 and 3712, Public Resources Code. Reference: Sections 3234(a) and 3752(a), Public Resources Code.

§ 1996.7. Date of Cessation of Drilling Operations.
"Date of cessation of drilling operations" means the date on which any or all equipment or machinery necessary for carrying out a drilling operation is removed from the well site.

Authority: Section 3013, Public Resources Code. Reference: Section 3234(e), Public Resources Code.

§ 1996.8. Date of Abandonment.
"Date of abandonment" means the date on which, in the judgment of the Supervisor, the plugging for the purpose of abandonment is completed or virtually completed.
Authority: Section 3712, Public Resources Code. Reference: Section 3752(a), Public Resources Code.

§ 1996.9. Extenuating Circumstances.
"Extenuating circumstances" mean conditions, beyond the control of the owner or operator, which have prevented the owner or operator from utilizing the competitive advantage from the information obtained from a well. "Extenuating circumstances" include, but are not limited to, the following:

(a) Active competitive leasing or mineral rights sales in the immediate vicinity of the well;
(b) Governmental or judicial action delaying oil, gas, or geothermal development;
(c) Natural disasters; or
(d) Scarcity of materials and equipment.

Authority: Sections 3013 and 3712, Public Resources Code. Reference: Sections 3234(a) and 3752(a), Public Resources Code.

§ 1996.10. Applicant.
"Applicant" means any person requesting permission to inspect and/or copy records on file with the Division of Oil, Gas, and Geothermal Resources.
Authority: Sections 3013 and 3712, Public Resources Code. Reference: Section 6250, Government Code.

Article 3. Status Determination

§ 1997. General.
All records filed with the Division of Oil, Gas, and Geothermal Resources, including records filed before July 1, 1976, are public records and are open for inspection and copying, except those records maintained in confidential status pursuant to Sections 3234 or 3752, Division 3 of the Public Resources Code.
Authority: Sections 3013 and 3712, Public Resources Code. Reference: Sections 3234(a) and 3752(a), Public Resources Code.

§ 1997.1. Request for Confidential Status.
(a) A request for confidential status pursuant to Sections 3234 or 3752, Division 3, Public Resources Code, must be filed prior to or at the time the records subject to said request are filed, and shall not apply retrospectively to portions of a well record already on file with the

Division for which confidential status had not been requested. Said request shall be made in writing to:

(1) The district deputy of the district in which the well is located, for an onshore oil or gas well (see map titled “Oil and Gas District Boundaries of the Division of Oil, Gas, and Geothermal Resources”);

(2) The district geothermal office for a geothermal well (see map titled “Geothermal District Boundaries of the Division of Oil, Gas, and Geothermal Resources”);

Such request shall be signed by a representative of the company.

(b) If the Supervisor fails to reply to a request for confidential status within twenty (20) working days from the date of receipt of such request, the request shall be deemed approved.

(c) Records that are the subject of a request for confidential status shall be retained in confidential status after receipt of the request until their status is determined by the Supervisor.

Authority: Sections 3013 and 3712, Public Resources Code. Reference: Sections 3234(a) and 3752(a), Public Resources Code.

§ 1997.2. Request for Extension of Confidential Status.

(a) A request for extension of confidential status pursuant to Sections 3234 or 3752, Division 3, Public Resources Code, shall be made in writing to the appropriate party, as indicated in Section 1997.1 of this article; shall document extenuating circumstances; and shall be signed by a representative of the company.

(b) If the Supervisor fails to reply to a request for extension of confidential status within twenty (20) working days from the date of receipt of such request, the request shall be deemed approved.

(c) Records that are the subject of a request for extension of confidential status shall be retained in confidential status after receipt of the request until their status is determined by the Supervisor.

Authority: Sections 3013 and 3712, Public Resources Code. Reference: Sections 3234(a) and 3752(a), Public Resources Code.

§ 1997.3. Classification as Experimental Log or Experimental Test.

(a) The Supervisor shall not consider a log or test for classification as experimental unless the owner or operator requests that such log or test be classified as experimental at the time of filing of the log or test with the Division. Such request shall be made in writing to the appropriate party, as indicated in Section 1997.1 of this article; shall contain justification for the request; and shall be signed by a representative of the company.

(b) If the Supervisor fails to reply to a request for experimental status within twenty (20) working days from the date of receipt of such request, the request shall be deemed approved.

(c) A log or test that is the subject of a request for classification as experimental shall be retained in confidential status after receipt of the request until the Supervisor determines whether it is experimental.

(d) The Supervisor may review the experimental classification of logs and tests to determine if the classification remains appropriate. If technological advances or other factors indicate the

experimental classification should be withdrawn, thus revoking confidential status, the Supervisor shall notify the operator of this decision. If no written appeal is made pursuant to section 1997.5 of this article, the Supervisor may open the log or test data to public review.
Authority: Sections 3013 and 3712, Public Resources Code. Reference: Sections 3234(d) and 3752(c), Public Resources Code.

§ 1997.4. Classification as Interpretive Data.

(a) An owner or operator may request that certain data filed with the Division be classified as interpretive; however, in the absence of such request, the Supervisor may classify data as interpretive.

(b) A request for classification of data as interpretive must be made at the time of filing of the data with the Division. Such request shall be made in writing to the appropriate party, as indicated in Section 1997.1 of this article; shall contain justification for the request; and shall be signed by a representative of the company.

(c) If the Supervisor fails to reply to a request for interpretive status within twenty (20) working days from the date of receipt of such request, the request shall be deemed approved.

(d) Data that are the subject of a request for classification as interpretive shall be retained in confidential status after receipt of the request until the Supervisor determines whether they are interpretive.

(e) The Supervisor may review the confidential status of interpretive data after a period of five years. The data shall remain confidential unless the Supervisor demonstrates that the data does not warrant classification as interpretive data. The Supervisor shall notify the operator of this decision. If no written appeal is made pursuant to section 1997.5 of this article, the Supervisor may open the interpretive data to public review.
Authority: Sections 3013 and 3712, Public Resources Code. Reference: Sections 3234(d) and 3752(c), Public Resources Code.

§ 1997.5 Appeal.

(a) An owner or operator may appeal to the Director of the Department of Conservation within thirty (30) days following notification of:

(1) the denial of a request for confidential status made pursuant to Section 1997.1 of this article, or

(2) the denial of a request for extension of confidential status under Section 1997.2 of this article or

(3) the denial of a request for, or the Supervisor's withdrawal of, classification as an experimental log or test, or interpretive data made pursuant to Sections 1997.3 or 1997.4 of this article. Such appeal shall be made in writing, shall contain justification for the appeal, and shall be signed by the owner, operator or a representative of the company.

(b) All records that are the subject of a denial of a request for, or extension of, confidential status made pursuant to Sections 1997.1 or 1997.2 of this article, or the subject of a denial of a request for, or withdrawal of, classification as an experimental log or test, or interpretive data made pursuant to Sections 1997.3 or 1997.4 of this article shall be confidential for a period of

thirty (30) days following notification of the denial or withdrawal to allow adequate time for the filing of an appeal. Records that are the subject of an appeal pursuant to this section shall be retained in confidential status pending the Director's decision on the appeal.

(c) If no written reply is made by the Director within thirty (30) days following the date of the appeal, the appeal shall be deemed denied and the records in question shall be public records.
Authority: Section 6253(a), Government Code. Reference: Section 6253(a), Government Code.

Article 4. Disclosure Procedures

§ 1998.2. Written Guidelines.

The Supervisor shall establish written guidelines for accessibility of public records consistent with these regulations. A copy of the guidelines shall be posted in a conspicuous public place at the offices of the Division and thereafter be available free of charge to any person.

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