

**MEMORANDUM OF AGREEMENT
AMONG THE
DEPARTMENT OF CONSERVATION, DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
AND
STATE WATER RESOURCES CONTROL BOARD
AND
REGIONAL WATER QUALITY CONTROL BOARDS
REGARDING
WELL STIMULATION TREATMENTS AND WELL STIMULATION TREATMENT-RELATED ACTIVITIES**

I. PURPOSE

This Memorandum of Agreement (“MOA”) satisfies certain provisions of Senate Bill 4 (Chapter 313, Statutes of 2013), hereinafter referred to as “SB 4.”¹ Among other requirements, SB 4 directs the Division of Oil, Gas, and Geothermal Resources in the California Department of Conservation (“Division”) to enter into one or more formal agreements with the State Water Resources Control Board (“State Water Board”) and any regional water quality control board (“Regional Water Board”) where well stimulation treatments may occur. The formal agreement(s) must delineate the agencies’ respective authority, responsibilities, and notification and reporting requirements associated with well stimulation treatments and well stimulation treatment-related activities, including water quality monitoring. (Pub. Resources Code, § 3160, subd. (c)(2).) In addition, the formal agreement(s) must specify the public entity responsible for water quality monitoring, include trade secret handling protocols as necessary, and provide for ready public access to information regarding well stimulation treatments and related activities. (Pub. Resources Code, § 3160, subd. (c)(3).) This MOA satisfies these requirements, focusing on the concurrent or similar legal authority, responsibilities, and requirements of the Division, State Water Board, and Regional Water Boards to protect public health and safety and the environment.

II. OVERVIEW OF STATUTORY AUTHORITY AND SB 4 REQUIREMENTS

A. Division

Chapter 1 (Oil and Gas Conservation) of Division 3 (Oil and Gas) of the Public Resources Code (commencing with section 3000) (“Chapter 1”) governs oil and gas activities in the State. Chapter 1 establishes the Division as the principal state agency charged with regulating the drilling, operation, maintenance, and abandonment of oil and gas wells on land not held by the federal government. The State Oil and Gas Supervisor supervises these activities on behalf of the Division as well as the operation, maintenance, and removal or abandonment of tanks and facilities attendant to oil and gas production. Such supervision is “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.” (Pub. Resources Code, § 3106, subd. (a).)

In regulating oil and gas activities and related facilities to protect the public and environment, the Division’s regulatory powers outside of and supplementary to SB 4 include, but are not limited to: (1) issuing permits

¹ “SB 4” refers to Senate Bill 4 (Pavley), Chapter 313, Statutes of 2013.

or approvals for oil and gas activities, such as the drilling or abandonment of wells; (2) investigating the environmental conditions and inspecting facilities associated with oil and gas activities and preparing related reports; (3) ordering and/or undertaking tests or remedial work; and (4) issuing enforcement orders for violations of applicable oil and gas law and permits or approvals.

SB 4 requires the Division to review applications from operators for well stimulation treatment permits (“WST Permits”). The Division may issue any such permit if the application is complete and any other applicable legal requirements are satisfied. Within five business days of issuing a WST Permit, the Division must provide a copy of the permit to the appropriate Regional Water Board(s). In addition, SB 4 establishes requirements for the handling of information that is or may be a trade secret. SB 4 provides authority to the Division to enforce against violations of Chapter 1 and its implementing regulations.

B. State Water Board and Regional Water Boards

The State Water Board and nine Regional Water Boards are the principal state agencies with primary responsibility to coordinate and control surface water and groundwater quality in the State. The legal authority of the State Water Board and Regional Water Boards generally extends to regulating any activity or factor(s) that may affect the quality of the waters of the state and includes the prevention and correction of water pollution and nuisance. The State Water Board and the Regional Water Boards derive their authority primarily from, and must exercise their authority in accordance with, the State Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.) and, where applicable, the federal Clean Water Act (33 U.S.C. § 1251 et seq.) and its implementing regulations. The Solid Waste Disposal Regulatory Reform Act of 1993 (Pub. Resources Code, § 43100 et seq.) provides additional authority for the State Water Board and the Regional Water Boards to regulate the disposal of solid waste for the purpose of protecting the waters of the state.

The regulatory powers of the State Water Board and Regional Water Boards related to water quality include, but are not limited to: (1) designating the beneficial uses of groundwater and surface waters and establishing water quality objectives to protect the uses; (2) investigating water quality issues, for example, by requiring water quality monitoring and reporting; (3) adopting water quality control plans, regulations, and policies; (4) issuing waste discharge requirements (WDRs) that regulate discharges of “waste”² that may affect the quality of the “waters of the state”³; (5) conditionally waiving the requirement to file a report of waste discharge (“ROWD”) and obtaining WDRs for certain discharges, such as low-threat discharges; (6) prohibiting types of waste discharges and/or waste discharges in certain locations; (7) issuing enforcement orders; and (8) receiving information from, and providing information to, governmental agencies and the public regarding water quality issues.

SB 4 requires the State Water Board to develop model criteria for groundwater monitoring addressing a range of spatial sampling scales from methods for conducting appropriate monitoring on individual oil and

² “Waste” includes “sewage and any other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for the purposes of, disposal.” (Wat. Code, § 13050, subd. (d).)

³ “Waters of the state” means any surface water or groundwater, including saline waters, within the boundaries of the state.” (Wat. Code, § 13050, subd. (e).)

gas wells subject to a well stimulation treatment, to methods for conducting a regional groundwater monitoring program. The State Water Board must develop regional groundwater monitoring programs, based on the model criteria, that will be implemented by the State Water Board and/or the appropriate Regional Water Board. The groundwater monitoring plans submitted as part of the WST Permit application and the WST Permits must comply with the model criteria and, where applicable, a regional groundwater monitoring program. Further, in the absence of an implemented regional groundwater monitoring program that covers the proposed stimulation activity, SB 4 requires approval from the State Water Board or Regional Water Boards for the operator-submitted groundwater monitoring plans. The State Water Board must review and update the model criteria and the groundwater monitoring programs as needed.

III. RESPONSIBILITIES AND REQUIREMENTS REGARDING WELL STIMULATION TREATMENTS AND WELL STIMULATION TREATMENT-RELATED ACTIVITIES

The Division, State Water Board, and Regional Water Boards (collectively, “Parties”) shall have the following responsibilities and requirements regarding well stimulation treatments and well stimulation treatment-related activities:

A. Well Stimulation Treatment Permits

1. Upon receiving an application for a WST Permit that includes the information relevant to regulating water quality, the Division shall forward a copy of the application (or some portion thereof as agreed upon) to the other Parties. The State Water Board and Regional Water Boards shall assist the Division in identifying the types of information that are relevant to regulating water quality. The Division shall notify the State Water Board and appropriate Regional Water Board of, and provide, any additional information that the Division receives during the application process that the State Water Board and Regional Water Boards determine is relevant to regulating water quality.
2. Upon determining that the Division received a complete application for a WST permit pursuant to section 1783, subdivision (c) of title 14 of the California Code of Regulations, the Division shall so notify the State Water Board and appropriate Regional Water Board in writing. The Division shall make the complete application (or some portion thereof as agreed upon) available to the State Water Board and Regional Water Board in accordance Section IV.F (Information Sharing) of this MOA.
3. Except where the Parties agree to a more expedited review upon the Division’s request, the State Water Board and Regional Water Board shall have 14 days from when the State Water Board or the Regional Water Board determines that the application is complete for purposes of regulating water quality and so notifies the Division in writing, or from when the Division notified the State Water Board and Regional Water Board that the application is complete pursuant to paragraph 2 of Section III.A of this MOA, whichever is earlier, to provide comments to the Division regarding the application, including, but not limited to, any water management plan or waste disposal method. The State Water Board or Regional Water Board may request in writing, with a courtesy copy to the WST Permit applicant, additional time to review and comment on the application. The total time for the State Water Board and Regional Water Board to review and comment should not exceed 45 days.

4. In reviewing the WST Permit application, the State Water Board and/or Regional Water Board may request from the Division, in writing, additional information relevant to regulating water quality.
5. The State Water Board and Regional Water Board may recommend that the Division add provisions (such as mitigation measures) to the WST Permit to address the State Water Board's and Regional Water Board's water quality concerns.
6. The Division shall include a condition in the WST Permit prohibiting the well stimulation treatment from commencing prior to the State Water Board or Regional Water Board approving the operator-submitted groundwater monitoring plan or program or issuing a letter of written concurrence that groundwater monitoring is not necessary. The State Water Board or Regional Water Board may consult with the Division in approving an operator-submitted groundwater monitoring plan or program.
7. The Division shall consider all of the State Water Board's and Regional Water Board's comments, including those related to the need for further review and/or additional provisions/mitigation, prior to issuing any WST Permit.
8. Upon receiving the 72-hour notice from an operator as provided in section 1783, subdivision (d) of title 14 of the California Code of Regulations, the Division shall: (1) relay the notice to the State Water Board and appropriate Regional Water Board; and (2) verify that the operator has an approved groundwater monitoring plan or program.
9. As used in Section III.A of this MOA, "in writing" shall include messages sent by electronic mail or using a Webportal.

B. Waste Discharge Requirements and Waivers

1. Upon receiving a ROWD that involves well stimulation treatment or well stimulation treatment-related activities, the Regional Water Board shall notify the State Oil and Gas Supervisor or his/her designee of the receipt of the ROWD. This requirement shall include, but not be limited to, any ROWD that documents that the discharge will comply with the conditions of general WDRs or a waiver of WDRs. The Regional Water Board shall provide a copy of the ROWD (or some portion thereof) to the Division upon its request.
2. If the Division provides comments to the Regional Water Board on the ROWD, the Division shall do so within 14 days of receiving the ROWD. The Division may request from the Regional Water Board additional information. The Division may request in writing, with a courtesy copy to the applicant, additional time to review and comment on the application; however, the total time to review and comment should not exceed 30 days.
3. The State Water Board and Regional Water Boards, as appropriate, shall provide to the State Oil and Gas Supervisor or his/her designee, any draft WDRs or waiver of WDRs that are provided to the public for review for well stimulation treatment or well stimulation treatment-related activities proposed in the ROWD.

4. The Division shall have 30 days to recommend that the State Water Board or Regional Board add provisions (such as mitigation measures) to the draft WDRs or waiver of WDRs. This 30-day period shall coincide with the public review and comment period for the draft WDRs or waiver of WDRs.

C. Investigation, Monitoring, and Reporting

1. The Regional Water Boards shall be the Parties primarily responsible for overseeing water quality monitoring and the investigation and clean up of leaks, spills, and other unauthorized discharges to waters of the state in the context of well stimulation treatment and well stimulation treatment-related activities. The Division and State Water Board shall assist as appropriate, including as this MOA, other agreements between the Parties, or applicable law may require.
2. The Division shall be the Party primarily responsible for overseeing equipment and well integrity and mechanical containment in the context of well stimulation treatment and well stimulation treatment-related activities.
3. The State Water Board shall inform the State Oil and Gas Supervisor or his/her designee when the State Water Board intends to review the WST groundwater monitoring criteria. The State Water Board shall allow the Division opportunity to comment during any such review and shall provide a copy of any updated WST model criteria or groundwater monitoring program to the Division.
4. The State Water Board or Regional Water Board, as appropriate, shall inform the State Oil and Gas Supervisor or his/her designee when the State Water Board or Regional Water Board requires any technical or monitoring program report or plan or prepares an inspection report related to well stimulation treatment or well stimulation treatment-related activities. The State Water Board or Regional Water Board, as appropriate, shall make any such report available to the Division upon its request. Any portion of a report or plan that might disclose protected information (e.g., trade secrets or secret processes) shall be made available to the Division for its use in regulating oil and gas activities consistent with applicable law. The Division shall not disclose the protected information to the public or other governmental agencies except as authorized or required by law and consistent with this MOA.
5. The Division shall inform the Executive Officer of the appropriate Regional Water Board or his/her designee when the Division prepares any investigative or inspection report that identifies potential or actual water quality impacts associated with well stimulation treatment or well stimulation treatment-related activities. The Division shall make any such report available to the Regional Water Board upon its request. Any portion of a report that might disclose protected information (e.g., trade secrets or other confidential information) shall be made available to the Regional Water Board for its use in regulating well operations associated with well stimulation consistent with SB 4, its implementing regulations, and any other applicable law. The Regional Water Board shall not disclose the protected information to the public or other governmental agencies except as authorized or required by law and consistent with this MOA.

6. Any Regional Water Board that receives notice pursuant to Water Code section 13271 of a discharge or potential discharge of a hazardous substance in or on any waters of the state related to oil or gas activities shall inform the State Oil and Gas Supervisor or his/her designee of the discharge or potential discharge where the Regional Water Board suspects that the discharge or potential discharge is associated with well stimulation treatment or well stimulation treatment-related activities.
7. The Division and the State Water Board and Regional Water Boards should cross-train each other's staff, as the Parties deem appropriate, to enhance field investigations designed to ensure compliance with WST Permits, WDRs and waivers of WDRs associated with well stimulation treatments and related laws under the Parties' respective legal authorities.

D. Enforcement Coordination

1. As soon as practicable, the Division shall notify the appropriate Regional Water Board's Executive Officer or his/her designee of any potential or actual WST-related pollution or nuisance conditions or other potential or actual water quality violations identified during the Division's inspection activities or in a complaint received by the Division.
2. As soon as practicable, the State Water Board or any Regional Water Board, as appropriate, shall notify the State Oil and Gas Supervisor or his/her designee of any potential or actual violations of the Division's regulations or WST Permit requirements identified during the State Water Board's or Regional Water Board's inspection activities or in a complaint received by the State Water Board or Regional Water Board.
3. If the Division, State Water Board, or a Regional Water Board determines that there is a violation of water quality-based statutory or regulatory requirements associated with well stimulation treatments or well stimulation treatment-related activities (e.g., WST Permit requirements, WDRs, or waiver of WDRs), the agency may take any actions under its authority that the agency deems appropriate to ensure that compliance is achieved.
4. The Parties should coordinate their enforcement actions and hearings to the extent appropriate. Where feasible, prior to ordering or otherwise requiring that remedial or preventative action be taken to address water quality issues, including, but not limited to, pollution and nuisance, the State Water Board or Regional Water Board, as appropriate, may consult with the State Oil and Gas Supervisor or his/her designee regarding the actions to be required. Where feasible, prior to ordering or otherwise requiring that remedial or preventative action be taken that may affect the waters of the state, the Division may consult with the Executive Officer of the appropriate Regional Water Board.
5. Nothing in this MOA shall be construed as precluding the Parties from taking independent enforcement actions or from responding timely to an emergency.

E. Water Quality Planning and Coordination

1. The State Water Board or Regional Water Board, as appropriate, may provide to the State Oil and Gas Supervisor or his/her designee any notice to adopt or revise a water quality control plan where the proposed new or revised provisions of such plan relate in whole or in part to discharges from well stimulation treatments and well stimulation treatment-related activities.
2. The Division shall have an opportunity to comment on the draft provisions or revisions in accordance with the standard procedures for public review of a water quality control plan or amendments thereto.
3. The Parties shall attempt to identify opportunities, in addition to those identified in this MOA, to share information regarding well stimulation treatment and well stimulation treatment-related activities, for example, by identifying reporting requirements to which operators are subject and exchanging the information reported for regulatory purposes. In implementing this MOA and in identifying the additional opportunities for information sharing, the Parties shall work toward developing a common understanding of terms frequently used in regulating well stimulation treatment and well stimulation treatment-related activities.

F. Information Sharing

1. For the purpose of regulating well stimulation treatment and well stimulation treatment-related activities, the Division, State Water Board, and Regional Water Boards may share or exchange information in a manner that is consistent with SB 4, the Public Records Act (Gov. Code, § 6250 et seq.), and any other applicable law. The information that may be shared or exchanged includes, but is not limited to, information that is subject to confidential well status pursuant to Public Resources Code section 3234 and information that is subject to protection as a trade secret.
2. Any information shared or exchanged between or among Parties that the transmitting Party deems protected from public disclosure shall include a written advisory to that effect (e.g., include "Confidential" in the subject line of the transmitting electronic mail). As used in this MOA, "Confidential Communication" refers to such information transmitted with the written advisory.
3. Only persons authorized in writing by the Director of the Department of Conservation, the Executive Director of the State Water Board or the Executive Officer of a Regional Water Board (as applicable) shall be permitted to obtain Confidential Communications.
4. Except by written agreement, or as required by court order, neither the Division, the State Water Board, nor any Regional Water Board shall release, disclose, discuss, or otherwise make available to the public any Confidential Communication or any other information which SB 4, the Public Records Act, or any other applicable law protects from public disclosure.
5. A Party that receives a request from a non-Party to release, disclose, discuss, or otherwise obtain access to any Confidential Communication (whether by way of subpoena, discovery request, request under the California Public Records Act, or other federal or state law) shall

notify the transmitting Party that deemed the information protected of the request before the date on which a response to such a request is due, with the goal of providing the notice at least five calendar days before the response deadline. Unless the transmitting Party consents to disclosure or release of the Confidential Communication, the Party that received the disclosure request shall assert all relevant privileges and other objections to the disclosure to the extent authorized by law and subject to any court orders.

G. Review Following Initial Implementation of the MOA and Completion of Mandated Documents

1. At a time following the initial implementation of this MOA that the Division, State Water Board, and Regional Water Boards deem appropriate, the Parties should meet to discuss and potentially modify the procedures (including timeframes) specified herein as related to Sections III.A and III.B with the goal toward improving the efficiency of the procedures while continuing to fulfill their regulatory purposes.
2. In addition to any other meetings that may otherwise be required, the Division, State Water Board, and Regional Water Boards should meet to review this MOA (1) following completion of the independent scientific study required by SB 4, and again (2) following completion of the environmental impact report required by SB 4, and amend this MOA as necessary in light of the information in such documents.

H. Other Responsibilities and Requirements

1. The Division, State Water Board, and Regional Water Boards shall have any other responsibilities and requirements as set forth in SB 4 and other statutes, regulations, and orders.
2. Any responsibility or requirement set forth in this MOA that is inconsistent with any regulation of the Division, State Water Board, or Regional Water Board shall be inoperative and not take effect unless and until the regulation is repealed or revised in a manner that provides consistency with this MOA. (See Pub. Resources Code, § 3160, subd. (c)(4).)

IV. ADDITIONAL PROVISIONS AND AGREEMENTS

A. Contact Information Within an Agency

1. Each Party is responsible for providing its contact information (e.g., electronic mail addresses and/or Webportal designations) to the other Party for transmitting notices and other information under this MOA.
2. No later than the effective date of this MOA, as specified below, the Parties shall exchange their contact information for implementing this MOA. The State Oil and Gas Supervisor shall provide the Division's contact information to the Executive Director of the State Water Board and the Executive Officer of each Regional Water Board. The Executive Director of the State Water Board and the Executive Officers of the Regional Water Boards shall provide their contact information to the State Oil and Gas Supervisor.

3. Each Party shall be responsible for updating its contact information with the other Parties, as appropriate, to ensure receipt of the notices and other information described in this MOA.
4. Each Party shall assist the others in identifying the appropriate contact(s) including agency personnel, for receiving information or handling inquiries regarding the matters addressed in this MOA.

B. Reservation of Authority

1. Nothing in this MOA shall be construed as delegating, limiting, or expanding the authority of the Division, State Water Board, or any Regional Water Board in carrying out their respective legal responsibilities for the management, regulation, coordination, and control of well stimulation treatments and well stimulation treatment-related activities.
2. Nor shall anything in this MOA be construed as affecting the discretion of the Division, State Water Board, or any Regional Water Board in carrying out their respective legal responsibilities for the management, regulation, coordination, and control of well stimulation treatments and well stimulation treatment-related activities.

C. Execution, Term, and Modification

1. This MOA represents the entire agreement of the Parties and merges and supersedes any prior written or oral representations, discussions, understandings, or agreements by, between, or among the Parties relating to the subject matter of this MOA except with regard to the 1988 agreement to the extent described in Section IV.E.2 of this MOA.
2. The Parties may execute this MOA in counterparts. Each executed counterpart shall have the same force and effect as an original instrument. Taken together, the executed counterparts shall constitute one and the same agreement.
3. This MOA shall become effective upon the date of final signature of the Parties.
4. This MOA shall continue in effect until modified by the mutual consent of the Parties or until terminated by a Party upon a 30-day advance written notice to all other Parties. A notice of termination given by a Regional Water Board shall terminate the MOA in its entirety only as to that Regional Water Board.

D. Ability to Enter Into Other Agreements

The Division may enter into separate formal agreements with the State Water Board or any Regional Water Board for purposes of achieving the goals of SB 4 and regulating well stimulation treatments and well stimulation treatment-related activities.

E. Construction

1. There may be instances in which more than one Regional Water Board should receive notice or other information from the Division in accordance with this MOA. The Division should attempt to identify such instances and provide the subject information to all appropriate Regional Water Boards. The Regional Water Boards should assist the Division in this regard.
2. In May 1988, the Division and State Water Board entered into a memorandum of agreement that outlined procedures for: (1) reporting proposed oil, gas, and geothermal underground injection and surface discharges; and (2) prescribing related permit requirements (“1988 MOA”). To the extent this MOA may conflict with or duplicate the 1988 MOA, this MOA controls.
3. Any determination that a provision of this MOA is invalid does not invalidate any other provision of this MOA or the MOA in its entirety.

F. Representation on Authority

Each Party represents and warrants that it has the right, power, and authority to execute this MOA. Each Party represents and warrants that it has given any and all notices, and obtained any and all consents, powers, and authorities necessary to permit it, and the persons executing this MOA for it, to enter into this MOA.

V. SIGNED AND DATED

MARK NECHODOM
Director
CALIFORNIA DEPARTMENT OF CONSERVATION

Date

STEVEN R. BOHLEN
State Oil and Gas Supervisor
DIVISION OF OIL, GAS, AND GEOTHERMAL
RESOURCES

Date

TOM HOWARD
Executive Director
STATE WATER RESOURCES CONTROL BOARD

Date

PAMELA CREEDON
Executive Officer
REGIONAL WATER QUALITY CONTROL BOARD,
CENTRAL VALLEY REGION

Date

MATTHIAS ST. JOHN
Executive Officer
REGIONAL WATER QUALITY CONTROL BOARD,
NORTH COAST REGION

Date

BRUCE H. WOLFE
Executive Officer
REGIONAL WATER QUALITY CONTROL BOARD,
SAN FRANCISCO BAY REGION

Date

PATTY Z. KOUYOUMDJIAN
Executive Officer
REGIONAL WATER QUALITY CONTROL BOARD,
LAHONTAN REGION

Date

KENNETH A. HARRIS JR.
Executive Officer
REGIONAL WATER QUALITY CONTROL BOARD,
CENTRAL COAST REGION

Date

ROBERT E. PERDUE
Executive Officer
REGIONAL WATER QUALITY CONTROL BOARD,
COLORADO RIVER REGION

Date

SAMUEL UNGER
Executive Officer
REGIONAL WATER QUALITY CONTROL BOARD,
LOS ANGELES REGION

Date

DAVID W. GIBSON
Executive Officer
REGIONAL WATER QUALITY CONTROL BOARD,
SAN DIEGO REGION

Date

KURT BERCHTOLD
Executive Officer
REGIONAL WATER QUALITY CONTROL BOARD,
SANTA ANA REGION

Date