

# **SB 4 INTERIM WELL STIMULATION TREATMENT REGULATIONS**

## **NOTICE OF PROPOSED EMERGENCY RULEMAKING ACTION**

### **REGARDING**

#### **TITLE 14. NATURAL RESOURCES DIVISION 2. DEPARTMENT OF CONSERVATION CHAPTER 4. DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES**

Notice Published December 11, 2013

**NOTICE IS HEREBY GIVEN** that the California Department of Conservation (Department) proposes to adopt emergency regulations necessary to implement SB 4, Chapter 313, Statutes of 2013. This action is being taken in accordance with Government Code Sections 11346.1 and 11349.6 of the California Administrative Procedures Act. **This regulation will be submitted to the Office of Administrative Law (OAL) on December 19, 2013, with an intended effective date of January 1, 2014.**

### **PUBLIC COMMENT**

If you wish to comment on proposed emergency regulations, you must submit the comment directly to OAL within five calendar days of OAL's posting of the proposed emergency regulations on the OAL Web site. You may submit comments on proposed emergency regulations to:

**Mail:**

OAL Reference Attorney  
300 Capitol Mall, Suite 1250  
Sacramento, California 95814

**Fax:**

(916) 323-6826

**E-mail:**

[staff@oal.ca.gov](mailto:staff@oal.ca.gov)

When you submit a comment to OAL, you must also submit a copy of your comment to the Department:

Mail:

Department of Conservation  
801 K Street, MS 24-02  
Sacramento, CA 95814  
ATTN: SB 4 Interim Well Stimulation Treatment Regulations

Fax:

(916) 324-0948

E-mail:

[DOGRRRegulations@conservation.ca.gov](mailto:DOGRRRegulations@conservation.ca.gov)

OAL will confirm that the agency has received the comment before considering it. Pursuant to California Code of Regulations, title 1, section 55, subdivision (b) (1) through (4), the comment must state that it is about an emergency regulation currently under OAL review, and include the topic of the emergency.

Adoption of emergency regulations does not require response to submitted comments. Any response to comments from the Department will be submitted to OAL within eight calendar days following the date of submission of the proposed emergency regulation to OAL, unless specific exceptions are applicable.

### **FINDING OF EMERGENCY**

Government Code section 11346.1, subdivision (b), allows a state agency to adopt emergency regulations if the agency makes a finding that the adoption of a regulation is necessary to address a situation that calls for immediate action to avoid serious harm to the public peace, health, safety, or general welfare. The Department of Conservation finds that the emergency adoption of regulations regarding the interim procedures for well stimulation treatment under the recently enacted Senate Bill 4 is necessary for the immediate preservation of the public peace, health and safety, or general welfare, as explained below.

## Basis for the Finding of Emergency

- On September 20, 2013, Governor Brown signed into law Senate Bill 4 (Pavley, Chapter 313, Statutes of 2013) (SB 4), which takes effect January 1, 2014. SB 4 complements existing rules that require some of the strongest well construction and operation standards in the nation by enacting further safeguards to public health and safety and the environment regarding the practices known as well stimulation treatment.
- SB 4 requires a permit from the Division of Oil, Gas and Geothermal Resources to conduct well stimulation treatment. The permit application must include detailed information about the fluids to be used, a ground water monitoring plan, and a water management plan. Copies of an approved permit must be sent to neighboring property owners and tenants, and water well testing must be provided upon request. SB 4 requires the Division to prepare regulations to ensure that well stimulation is done safely and to require detailed public disclosure about the well stimulation.
- SB 4 includes Public Resources Code section 3161, which provides for an interim grace period from SB 4's permitting requirement until the new regulations required under SB 4 are in effect. Section 3161, subdivision (b), directs the Division to allow well stimulation treatment while the regulations are being developed, provided that the operator certifies compliance with specified requirements in SB 4.
- Action is necessary in order to implement, on an emergency basis, the provisions of Public Resources Code section 3161. Several of the requirements for the interim certificate of compliance are subject to interpretation and would be difficult to implement in the absence of interpretive regulations. In addition, the Division must clarify the definition of "well stimulation treatment" and establish thresholds in order to resolve questions as to which operations are subject to the new requirements.
- The Legislature specifically contemplates that the emergency rulemaking process will be used to implement the interim provisions of Public Resources Code section 3161. Subdivision (b)(6) of that section specifically states, "The division has the emergency regulatory authority to implement the purposes of this section." This provision is an express legislative finding that emergency adoption is appropriate for the regulations implementing the interim certificate of compliance for well stimulation treatment.
- Without the implementation of emergency regulations, as of January 1, 2014, the interim certificate of compliance requirements will go into effect without specific guidance or parameters. This would result in a lack of clarity that would make it difficult

for the regulated industry to comply with the interim requirements and difficult for the Division to enforce them.

- In Section 1 of SB 4, the Legislature finds and declares that, “Providing transparency and accountability to the public regarding well stimulation treatments, including, but not limited to, hydraulic fracturing, associated emissions to the environment, and the handling, processing, and disposal of well stimulation and related wastes, including from hydraulic fracturing, is of paramount concern.” Lack of certainty as to what is required under the interim certification of compliance process would result in uneven compliance with some or all of the requirements, and would therefore undermine the express intent of SB 4.
- California is one the nation’s largest oil gas producer and oil and gas production is a significant contributor to the state’s economy and its energy supply. In Section 1 of SB 4, the Legislature finds and declares that, “The hydraulic fracturing of oil and gas wells in combination with technological advances in oil and gas well drilling are spurring oil and gas extraction and exploration in California. Other well stimulation treatments, in addition to hydraulic fracturing, are also critical to boosting oil and gas production.” Oil and gas production involves substantial advance planning and investment and a lack of certainty as to what is required under the interim certification of compliance process would be disruptive for this important industry.

For these reasons, pursuant to Government Code section 11346.1, subdivision (b), the Department is adopting regulations regarding the interim certificate of compliance process for well stimulation treatment as emergency regulations.

#### AUTHORITY AND REFERENCE

Pursuant to the authority vested by Sections 3013, 3160 and 3161 of the Public Resources Code, and to implement, interpret or make specific Sections 3106, 3150, 3151, 3152, 3153, 3154, 3156, 3157, 3158, 3159, 3160, 3161 of the Public Resources Code, and Section 10783 of the Water Code, the Department is considering changes to Chapter 4 of Division 2 of Title 14 of the California Code of Regulations as follows: adoption of sections 1761, 1780, 1781, 1782, 1783, 1783.1, 1783.2, 1783.3, 1783.4, and 1788.

#### POLICY STATEMENT OVERVIEW / INFORMATIVE DIGEST

Senate Bill 4 (Pavley, Chapter 313, Statutes of 2013) was signed by Governor Brown on September 20, 2013. The intent of SB 4 is to provide a comprehensive regulatory

framework for well stimulation treatments in California. SB 4 requires a permit from the Division of Oil, Gas and Geothermal Resources to conduct well stimulation. The permit application must include detailed information about the fluids to be used, a ground water monitoring plan, and a water management plan. Copies of an approved permit must be sent to neighboring property owners and tenants, and water well testing must be provided upon request. SB 4 requires the Division to prepare regulations to ensure that well stimulation is done safely and to require detailed public disclosure about the well stimulation. The Division must develop an internet website to facilitate public disclosure of well stimulation information, and the website must allow the public to easily search and aggregate the information.

SB 4 requires the Division to prepare an environmental impact report, consistent with the California Environmental Quality Act, addressing the practice of well stimulation in California. Additionally, SB 4 requires the Natural Resources Agency to complete an independent scientific study on well stimulation treatments, and the State Water Resources Control Board to develop groundwater modeling criteria and implement groundwater monitor programs.

Additionally, SB 4 includes Public Resources Code section 3161, which provides for an interim grace period from SB 4's permitting requirement until the new regulations required under SB 4 are in effect. Section 3161, subdivision (b), directs the Division to allow well stimulation treatment while the regulations are being developed, provided that the operator certifies compliance with specified requirements in SB 4.

Well stimulation is a short term and non-continual process designed to enhance oil and gas production or recovery. Initially, the Department's rulemaking effort had focused on one specific form of well stimulation: hydraulic fracturing. Hydraulic fracturing is the high-pressure injection of a mix of fluids and proppants into an oil or gas reservoir. The mix, injected under pressure, fractures the reservoir rock. When the fluids are removed, the proppants keep open the cracks left by the fracturing, allowing oil or natural gas to flow back to the well. Fracturing the rock is necessary to extract oil or natural gas from formations in which the pore space in the rock making up the oil or natural gas reservoir is too tight to allow the flow of fluids or gasses to the well.

With the increased use of the practice in other parts of the country, public scrutiny of hydraulic fracturing has become as common as the practice itself. Public concern over a perceived lack of regulation has become widespread, highlighted by various documentaries, studies, reports, and proposed legislation, at both the federal and state level.

SB 4 began as a bill to regulate hydraulic fracturing, but was expanded to include all forms of well stimulation due in part to lack of public information about these procedures and new information about oil reserve estimates in areas of the state not previously subject to widespread oil recovery activity, such as the Monterey Shale.

### Existing Law

All oil and gas wells drilled and constructed in California must adhere to strict requirements. As specified in Public Resources Code, Division 3, Chapter 1, section 3106, the Department's Division of Oil, Gas, and Geothermal Resources (Division) regulates oil, gas, and geothermal well operations throughout the State. Public Resources Code section 3106 requires the Division supervise the drilling, operation, and abandonment of oil and gas wells "so as to prevent, as far as possible, damage to life, health, property, and natural resources ...." Also included in Public Resources Code section 3106 is the authority to allow, with Division approval and oversight, the oil and gas industry to "utilize all methods and practices known to the oil industry for the purpose of increasing the ultimate recovery of underground hydrocarbons." Essentially, Public Resources Code section 3106 mandates the Division to find a balance between health and safety, and the recovery of underground hydrocarbons.

In accordance with these statutory mandates, the Division has numerous existing regulations regarding oil and gas operations in California. These regulations include requirements regarding the protection of underground and surface water; testing and monitoring to ensure the integrity of the well casing; the cement used to secure the well casing inside the bore hole; the cement and equipment used to seal off the well from underground zones bearing fresh water, and other hydrocarbon resources; and minimum maintenance requirements for oil and gas production facilities. These requirements provide a first line of protection from potential damage caused by all aspects of oil and gas production, including well stimulation.

SB 4 complements the existing rules that require some of the strongest well construction and operation standards in the nation by requiring further safeguards to public health and safety and the environment regarding well stimulation treatment.

Under the mandates of SB 4, the Department has already commenced the rulemaking process for the proposed permanent SB 4 Well Stimulation Treatment Regulations. The notice of that proposed rulemaking action was sent to interested parties and was posted on the Notice Register on October 15, 2013. As required by SB 4, the permanent regulations will be effective on January 1, 2015. Information about those proposed regulations can be found on the Department's public website at <http://www.conservation.ca.gov/index/Pages/prpsregs.aspx>.

### Proposed Interim Regulations

The objective of the proposed interim regulations is to implement the requirement under Public Resources Code section 3161 to allow well stimulation treatment while the permanent well stimulation treatment regulations are being developed, provided that the operator certifies compliance with specified requirements in SB 4. In addition to achieving the statutory goal of Public Resources Code section 3161, the benefit of the proposed interim regulations is that they will supplement the Division's current oil and gas regulatory framework with regulations specific to well stimulation treatment and will further the statutory mandate under Public Resources Code section 3106 to prevent, as far as possible, damage to life, health, property, and natural resources.

The proposed interim regulations establish procedures and requirements for operators providing written notice of well stimulation treatment and certifications of compliance, as required under Public Resources Code section 3161. The proposed interim regulations provide necessary definitions, including clarification of the definition of "well stimulation treatment." The proposed regulations address the distinction between well stimulation treatment and other routine operations; the distinction between well stimulation and underground injection projects; and the acid concentration threshold at which an acid matrix stimulation treatment is subject to the requirements of SB 4. The proposed interim regulations implement the neighbor notification and water well testing requirements of Public Resources Code section 3160, subdivision (d)(6) and (7). The proposed interim regulations provide interim model groundwater monitoring criteria for groundwater sampling, testing, and monitoring related to well stimulation that is conducted prior to the finalization of model groundwater monitoring criteria by the State Water Resources Control Board. The proposed interim regulations implement the public disclosure requirements of Public Resources Code section 3160, subdivisions (b) and (g). The proposed interim regulations provide general requirements for well stimulation treatment. These objectives are discussed further below.

- The benefit of the proposed interim regulations regarding written notice and certifications of compliance prior well stimulation treatment is that clear procedures and timeframes will be established and understood by the regulated industry and the general public.
- The proposed Interim regulations address the difference between well stimulation and underground injection projects. The objective of the proposed regulations is to define the two separate terms and clarify that both are subject to two distinct regulatory frameworks. The benefit of the proposed regulation is clarity for the Division, operators,

and the public regarding which set of regulations oversee a specified oil and gas operation.

- The proposed interim regulations address the specified acid concentration threshold at which the regulations are applicable; the point at which well stimulation treatment begins and ends, for purposes of the regulations; and the distinction between well stimulation treatment requirements, and underground injection project requirements. The objective of the proposed regulation is to establish the necessary parameters for the requirements of the proposed regulations. The benefit of the proposed regulation is clarity for the Division, operators, and the public regarding which set of regulations oversee a specified oil and gas operation.
  
- The proposed interim regulations include general requirements for well stimulation treatment that to ensure best practices and existing requirements are adhered to with regards to the following:
  - Effective cementing of the well;
  - Isolation of the productive zone;
  - Testing and maintenance to ensure mechanical integrity of the wellbore;
  - Proper rigging and testing of surface equipment;
  - Appropriate well stimulation treatment fluid concentrations; and
  - Updating the Spill Contingency Plan.

These general requirements will have the benefit of ensuring integrity of wells and well casings, and geologic and hydrologic isolation.

#### CONSISTENCY WITH FEDERAL STATUTE AND REGULATION

The federal Bureau of Land Management (BLM) is in the process of developing regulations regarding well stimulation treatment on federal and Indian lands. Operators with leases on federal lands must comply with both BLM's regulations and with state operating requirements. The Department is in regular dialogue with BLM for the purpose of ensuring harmonized and efficient implementation of the two agencies' respective regulations. The Department will continue to work with BLM to ensure that the well stimulation regulations are compatible.

The U.S Safe Drinking Water Act (SDWA) mandates the protection of underground sources of drinking water from endangerment related to underground injection activities (42 U.S.C. § 1421(b)(1)). The Underground Injection Control (UIC) Program requirements promulgated under SDWA authority and codified at 40 CFR Parts 124 and



144 through 148 create a regulatory framework to ensure protection of current and future USDWs from endangerment. Underground injection of fluids through wells is subject to the requirements of the SDWA except where specifically excluded by the statute. In the 2005 Energy Policy Act, Congress revised the SDWA definition of “underground injection” to specifically exclude from UIC regulation the “underground injection of fluids or propping agents (other than diesel fuels) pursuant to hydraulic fracturing operations related to oil, gas, or geothermal production activities” (42 U.S.C. § 1421(d)(1)(B)). UIC regulations further provide that “[a]ny underground injection, except into a well authorized by rule or except as authorized by permit issued under the UIC program, is prohibited” (40 CFR 144.11).

The general exclusion of hydraulic fracturing from the SDWA in no way precludes the state from regulating hydraulic fracturing or any other form of well stimulation treatment. To the extent that the SDWA does apply, the proposed regulations are consistent with the federal law and the proposed regulations will effectively prevent well stimulation treatment from endangering underground sources of drinking water.

#### CONSISTENCY WITH EXISTING STATE REGULATIONS

The proposed interim regulations reflect extensive consultation with other state agencies with authority over aspects of oil and gas production operations. The proposed regulations are intended to dovetail with the requirements implemented by other state agencies. The proposed regulations are not inconsistent or incompatible with existing state regulations.

#### LOCAL MANDATE

This proposal does not impose a mandate on local agencies or school districts.

#### FISCAL IMPACT

This proposal does not impose costs on any local agency or school district for which reimbursement would be required pursuant to Part 7 (commencing with Section 17500) of Division 4 of the Government Code. This proposal does not impose other nondiscretionary cost or savings on local agencies. This proposal does not result in any cost or savings in federal funding to the state.

#### COST OR SAVINGS TO STATE AGENCIES

The Department estimates that implementation of the requirements in the proposed interim regulations will result in additional expenditures of approximately \$373,000 in the

current State Fiscal Year. It is anticipate that the Department will be able to absorb these additional costs within its existing budgets and resources.

#### AVAILABILITY OF DOCUMENTS ON THE INTERNET

The proposed regulatory language for the proposed emergency regulations can be accessed through our website at: <http://www.conservation.ca.gov>.

If you have any questions regarding the process for the proposed emergency action, please contact Tim Shular, Office of Governmental and Environmental Relations at (916) 322-3080, or by email at [DOGGRRegulations@conservation.ca.gov](mailto:DOGGRRegulations@conservation.ca.gov).