

WELL STIMULATION TREATMENT (WST) PERMITTING PHASE-OUT

NOTICE OF PROPOSED RULEMAKING ACTION

REGARDING

TITLE 14. NATURAL RESOURCES

DIVISION 2. DEPARTMENT OF CONSERVATION

CHAPTER 4. DEVELOPMENT, REGULATION, AND CONSERVATION OF OIL AND GAS RESOURCES

Notice Published February 9, 2024

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NOTICE IS HEREBY GIVEN that the California Department of Conservation (Department) through its Geologic Energy Management Division (CalGEM) proposes to adopt the regulation described below after consideration of all comments, objections, and recommendations regarding the proposed action. With this rulemaking, the Department will propose a permanent regulation after the consideration of all comments, objections, and recommendations.

WRITTEN COMMENT PERIOD AND PUBLIC COMMENT HEARINGS

Any person or their authorized representative may submit written statements, arguments, or comments relevant to the proposed regulatory action to the Department. Comments may be submitted by email to calgemregulations@conservation.ca.gov or by mail to:

Department of Conservation
715 P Street, MS 19-07
Sacramento, CA 95814
ATTN: Well Stimulation Permitting Phase-Out

The written comment period closes at 11:59 p.m. on March 27, 2024. The Department will consider only comments received at the Department's offices by that time.

Public Hearing

Any interested person or their authorized representative may present comments regarding the proposed action, either orally or in writing, at the public hearing to be held virtually on zoom on **March 26, 2024 at 5:30 pm.**

Register for the public hearing on zoom:

https://us06web.zoom.us/webinar/register/WN_9zermefDRJGhIZLJpLZrAA

Or join by telephone: US Toll 404-443-6397

US Toll Free 877-336-1831

Conf Code: 148676

Services such as translation between English and other languages may be provided upon request. To ensure availability of these services, please make your request no later than ten working days prior to the hearing by calling the staff person referenced in this notice.

Servicios como traducción de inglés a otros idiomas pueden hacerse disponibles si usted los pide en avance. Para asegurar la disponibilidad de estos servicios, por favor haga su petición al mínimo de diez días laborables antes de la reunión, llamando a la persona del personal mencionada en este aviso.

AUTHORITY AND REFERENCE

The Department is considering making changes to Article 4, Subchapter 2 of Chapter 4 of Division 2 of Title 14 of the California Code of Regulations as follows: amend section 1780.

Public Resources Code sections 3013 and 3160 authorize the Department to amend the regulation as proposed. The proposed regulation will implement, interpret, make specific, or reference sections 3106, 3011, and 3160 of the Public Resources Code.

INFORMATIVE DIGEST / POLICY STATEMENT

Existing Law

CalGEM supervises the drilling, operation, maintenance, and plugging and abandonment of onshore and offshore oil, gas, and geothermal wells. CalGEM carries out its regulatory authority under a legislative mandate to encourage the wise development of oil and gas resources, while preventing damage to life, health, property, and natural resources, including underground and surface waters suitable for domestic or irrigation purposes. (Pub. Resources Code, § 3106.) CalGEM's duties include the protection of public health and safety and environmental quality, including reduction and mitigation of greenhouse gas emissions associated with the development of hydrocarbon resources. (Pub. Resources Code, § 3011.)

On September 20, 2013, Governor Brown signed into law Senate Bill 4 (Pavley, Chapter 313, Statutes of 2013) (SB 4). In the context of widespread public concern about hydraulic fracturing and other well stimulation treatment (WST) practices employed to

facilitate oil and gas production, SB 4 imposed a wide range of new standards and requirements applicable to WST operations, including the requirement for a discretionary permit from CalGEM prior to conducting WST. (See Pub. Resources Code, § 3160, subd. (d).) As required in Public Resources Code section 3160, CalGEM completed a rulemaking to establish an extensive regulatory framework for WST. The WST regulations are in California Code of Regulations, title 14, division 2, chapter 4, subchapter 2, article 4 (Sections 1751, 1761, 1780-1789).

Section Affected

CalGEM proposes an amendment to California Code of Regulations, title 14, section 1780 to add a new subsection (d) to phase out permits to conduct well stimulation treatments (WST).

Consistency with Comparable Federal Regulation or Statute

The U.S Safe Drinking Water Act (SDWA) mandates the protection of underground sources of drinking water (USDW) 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 C.F.R. § 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 WST. To the extent that the SDWA does apply, the proposed regulation is consistent with the federal law and will effectively prevent WST from endangering underground sources of drinking water.

Objectives and Benefits of the Proposed Amended Regulation

The proposed amendment would cease issuance of WST permits for oil and gas wells in California. This policy will serve the purposes of helping to prevent damage as far as possible to life, health, property, and natural resources, and protecting public health and safety, including the reduction and mitigation of greenhouse gas emissions associated

with the development of hydrocarbon resources, consistent with legislative directives found in Public Resources Code sections 3011 and 3106.

Consistency with Existing State Regulations

CalGEM has determined that the proposed regulation is not inconsistent or incompatible with existing state regulations as it is an integrated complement to the SB 4 regulations rather than a competing rule. CalGEM is the only state agency with regulations specific to WSTs associated with oil and gas production. To the extent other state agencies may enforce health, safety, or environmental protection standards that could apply to WSTs because they are regulations of general application affecting a wider range of industrial activities, those regulations are not expected to be inconsistent or incompatible with the regulation proposed here.

PLAIN ENGLISH REQUIREMENT

Department staff prepared the proposed regulation pursuant to the standard of clarity provided in Government Code section 11349 and the plain English requirements of Government Code sections 11342.580 and 11346.2, subdivision (a)(1). The proposed regulation is written to be easily understood, to the extent possible given the technical subject matter, by the persons that will use it.

LOCAL MANDATE

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

COST OR SAVINGS TO STATE AGENCIES

Total savings to state agencies as a result of the WST permitting phase-out is anticipated to equal between \$11.6 million and \$12.3 million per year beginning year 3 after the regulation becomes effective and during each following year that WST would have been permitted but is not. Assuming a 2024 effective date, Year 1 would not result in any savings because permits are still being processed until the prohibition of new permits begins. In Year 2, CalGEM and the State Water Resources Control Board would begin to reduce their staff, while the California Air Resources Board (CARB) will wait to reduce staffing until Year 3.

- CalGEM anticipates a reduction in needed positions equal to between \$9.7 million and \$10.4 Million (56 positions).
- CARB anticipates that their existing 6 positions will be needed for the first year that permits are not issued (Year 2), but they will only need 2 positions going forward (Year 3+) for a savings of \$759,000 per year.

- State Water Resources Control Board estimates that 5 positions, with average operating expense of approximately \$1.1 million, will no longer be needed.

COST OR SAVINGS TO LOCAL AGENCIES

This proposed action 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 costs or savings on local agencies.

COST OR SAVINGS IN FEDERAL FUNDING

The proposed action does not affect federal funding to the state.

EFFECT ON HOUSING COSTS

The proposed action will not have a significant effect on housing costs.

IMPACT ON BUSINESS

The proposed regulation will affect owners and operators of oil and gas wells who would have been likely to apply for WST permits on their wells in the future absent the prohibition. The regulation will also affect mineral rights owners who might have received some additional economic benefit absent the prohibition. There would be no reporting, recordkeeping, or compliance requirements as a result of the proposed regulation

SIGNIFICANT ADVERSE ECONOMIC EFFECT

CalGEM made an initial determination that adoption of this regulation may have a significant, statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. CalGEM has considered proposed alternatives that would lessen any adverse economic impact on business and is inviting the public to submit additional proposals. Submissions may include the following considerations:

- The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to businesses.
- Consolidation or simplification of compliance and reporting requirements for businesses.
- The use of performance standards rather than prescriptive standards.
- Exemption or partial exemption from the regulatory requirements for businesses.

RESULTS OF THE STANDARDIZED REGULATORY IMPACT ASSESSMENT

CalGEM has determined that this rulemaking action is a major regulation and has completed a Standardized Regulatory Impact Assessment (SRIA) for this rulemaking, which has been provided to the Department of Finance (DOF) for review and comment. The SRIA, DOF's comments on the SRIA, and CalGEM's response to DOF's comments are attached to the Initial Statement of Reasons for this rulemaking action. DOF's comments on the SRIA and CalGEM's responses are also provided below under SUMMARY OF DEPARTMENT OF FINANCE COMMENTS ON THE STANDARDIZED REGULATORY IMPACT ASSESSMENT AND CALGEM'S RESPONSES.

The SRIA found that the proposed regulation will have a significant impact on business-as-usual economic activity in the state's oil and gas sector, and this translates into net losses for established business in and closely allied to WST activities in the sector. The proposed regulation will also have a net impact on the state's overall economy, reducing average annual real GSP relative to the baseline reference by about \$2 billion per year (0.04% of baseline GSP) over the period 2024-2033. The impact on the state's overall economy is overwhelmed by baseline aggregate growth, and the state economy and the sector itself will otherwise continue the robust average growth it has enjoyed for two generations. For these reasons, the Division has made the following determinations:

- The proposed regulation will affect the elimination of jobs within the State of California.
- The proposed regulation may affect the creation of new business or the elimination of existing businesses within the State of California.
- The proposed regulation may affect the contraction of businesses currently doing business in the State of California.
- The proposed regulation may affect the ability of businesses within California to compete with businesses in other states.
- The proposed regulation is unlikely to affect the competitive advantages or disadvantages for businesses doing business in the State of California.
- The proposed regulation will likely affect the increase or decrease of investment in the State of California.
- The proposed regulation may affect incentives for innovation in products, materials, or processes.

Further, CalGEM has determined that the proposed regulation will result in nonmonetary benefits such as protection of public health and safety, environmental safety, and transparency in government and business. Specifically, the benefits are as follows:

- Public health benefits from reduced pollution exposure

- Avoided worker injuries
- Reduced water use
- Reduction in damage to soil and water from WST related contaminants
- Reduced burden on low-income and disadvantaged communities
- Reduction in damage to wildlife habitat
- Reduction in the volume of high carbon intensity crude produced
- Reduction in impacts to disproportionately vulnerable populations
- Public health benefits of reduced anxiety and fear associated with public concern around WST

COST IMPACTS ON A REPRESENTATIVE PRIVATE PERSON OR BUSINESS

Any direct costs to operators of oil and gas wells and mineral owners would come in the form of lost profits. This foregone revenue represents the future oil and gas production that would have been derived from WST-facilitated production in the absence of the regulation. In total, the proposed WST phase-out is estimated to result in 1,442 fewer oil wells being drilled over the period of 2024-2033. The decline in production leads to associated declines in revenue, which are estimated at \$23,599,412 in the first year, and increasing every year thereafter as more and more wells go undrilled and unstimulated.

The specific impact on an individual operator will depend on whether that operator would have been likely to apply for and be permitted to use WST in their future operations and would include any decline in their production associated with decisions to forgo new wells or treatment of existing wells due to the prohibition on WST. Many in-state oil and gas firms have at least some wells with a history of WST in their operational portfolio, including the current top producing firms. Almost all WST application in California occurs at onshore wells in the San Joaquin Basin. Only a small portion of WST carried out in the state has occurred at offshore wells or in other parts of the state.

Over the past decade twelve different operators have completed WSTs across four counties. However, the vast majority of treatments have been carried out in Kern County and most at wells in one of three fields (Belridge North, Belridge South, or Lost Hills). While Kings, Orange, and Ventura Counties each have 1-3 wells that have received WST permits, Kern County has more than 2,200 of these wells between 2014 and 2021. In total, since late 2016, when CalGEM started issuing WST permits, 710 wells were treated. During the same time period, CalGEM denied 166 WST permit applications. WST induced production represented about 15-20% of total oil and gas production in California over the past 5 years.

For 2020, the most recent year with available data, CalGEM estimates that 12.1% of total oil and 16.6% of total gas in California came from wells that have received WST at any

time in the past. Wells that have received WST pursuant to permits issued by CalGEM under SB 4 and the associated regulations (i.e. after 2015) accounted for only 2% of total state production in 2020. CalGEM experts and third-party assessors concur that these regional patterns would be likely to continue absent the proposed permitting phase out regulation.

SUMMARY OF DEPARTMENT OF FINANCE COMMENTS ON THE STANDARDIZED REGULATORY IMPACT ASSESSMENT AND CALGEM'S RESPONSES

The Department of Finance (DOF) generally concurred with CalGEM's SRIA for the proposed regulations and found that it meets the requirements for the SRIA but added one critique of the analysis as presented in the document. DOF's comments on the SRIA and CalGEM's response are summarized as follows:

While the SRIA includes a comprehensive discussion of the regulation's impact on Kern County property tax revenue, it must include a dollar estimate of the revenue impact. In this case, multiplying the quoted \$197 million figure for the county's property taxes by the estimated 10 percent upper bound for the reduction in property value would produce an annual impact of about \$20 million.

CalGEM generally concurs with DOF's calculation. However, it is important to point out that this is a very conservative (i.e., high) estimate of the impact on tax revenue based on macroeconomic modeling. As noted, in the SRIA, property taxes in fiscal year 2018-19 from oil and gas facilities represented some \$197 million, 7.4% of all Kern County tax revenue. Regulations pertaining to the valuation of oil and gas properties allow for taxable amounts to be reassessed over time in response to "changes in the expectation of future production capabilities." (See Cal. Code Regs., tit. 18, § 468.) Thus, Kern County's tax revenues are influenced by changes in both the valuation of existing oil and gas operations and the establishment and valuation of new operations in the future. Macroeconomic modeling suggests that existing production assets in Kern County are likely to lose less than 10% of their current value, with a property tax revenue decline of less than 1% of total county tax revenue annually. Ten percent represents the upper bound of possible property tax impacts associated with oil and gas operations. This proposed regulation impacts the limited number of oil operators who use this technology. The dollar figure produced using 10% of annual revenue of \$19.7 million is therefore a high, conservative estimate, and the actual property tax impacts are likely to be substantially less.

CONSIDERATION OF ALTERNATIVES

In accordance with Government Code section 11346.5, subdivision (a)(13), CalGEM must determine that no reasonable alternative it considered, or that was otherwise identified and brought to the Department's attention, would be more effective in carrying out the

purpose for which the action is proposed, would be as effective and less burdensome to affected private persons than the proposed action, or would be more cost effective to affected persons and equally effective in implementing the statutory policy or other provision of law.

The SRIA for the proposed regulation evaluates alternatives to the proposals. No alternative considered by CalGEM would be more effective in carrying out the purposes of the proposed regulation or would be equally effective but less burdensome to affected private persons and small businesses than the proposed regulation. The proposed regulation will further the statutory mandates and regulatory goals for the protection of health, safety and the environment.

Nevertheless, CalGEM invites interested persons to submit comments regarding alternatives to the proposed regulation during the written comment period, or to present any such comments regarding alternatives, either orally or in writing, at the hearing scheduled to receive comments relevant to the proposed action.

SMALL BUSINESS DETERMINATION

Oil and gas production operations generally are not among the types of business activities categorized as a "small business" under the statutory definition applicable to this rulemaking determination. (See Gov. Code, § 11342.610; Cal. Code Regs., tit. 1, § 4.) That said, in terms of oil and gas operators themselves, most of the WST-facilitated production in California is carried out by relatively large, economically robust firms. While some WST activity has been carried out by smaller, more marginal firms, such firms are not representative of the operator community that typically employs WST.

Firms that provide specialized WST services to oil and gas production operators must overcome hurdles of large capital expense and technical expertise that act as a barrier to any business with gross receipts and employee numbers low enough to meet the applicable statutory definition of "small business."

Some impacts to small businesses other than the regulated community of oil and gas operators or firms engaged in providing specific WST services may arise in spatial proximity to wells where stimulation would have otherwise occurred. These businesses may have no formal relation to oil and gas operations and are instead composed of the goods and service vendors (e.g., retail, restaurants) whose clientele happen to include oil and gas industry workers. Relative to the baseline case of WST as it is presently permitted, these businesses may see reduced patronage if oil and gas firms engage in less robust local operations that call for fewer employees in the area. Additionally, small businesses in general may be disproportionately affected by changes in fuel and other energy product costs – though, as discussed in the SRIA, price effects stemming from the proposed regulation should be modest.

CONTACT INFORMATION

Inquiries concerning the proposed action may be directed to CalGEMRegulations@conservation.ca.gov or by mail to:

Department of Conservation
715 P Street, MS 1907
Sacramento, CA 95814
Phone: (916) 322-3080
Attn: WST Permitting Phase Out

Primary Contact

Chris Hansen
Regulations Manager

christine.hansen@conservation.ca.gov
(916) 694-7577

Secondary Contact

Katherine Litzky
Assistant Director of the Office of
Legislative and Regulatory Affairs

katherine.litzky@conservation.ca.gov
(916) 201-1084

Please direct requests for copies of the text of the proposed regulation, the initial statement of reasons, or other information upon which this rulemaking is based to the Department at the above address.

AVAILABILITY OF RULEMAKING FILE

The Department has prepared an initial statement of reasons for the proposed action, has available all the information upon which its proposal is based, and the express terms of the proposed action. The Department will have the entire rulemaking file available for inspection and copying throughout the rulemaking process at its office at the above address. As of the date this Notice is published in the Notice Register, the rulemaking file consists of this Notice, the proposed text of the regulation, the initial statement of reasons, the documents relied upon, the standardized regulatory impact assessment, and a standard form 399.

Copies of these documents may be obtained by contacting the Department at the address and phone number listed above.

AVAILABILITY OF CHANGED OR MODIFIED TEXT

After the written comment period and any hearing(s) that may be conducted by the Department to receive comments regarding the proposed regulation, the Department will consider all timely and relevant comments received. Thereafter, the Department

may adopt the proposed regulation in substantially the same form as described in this notice.

If the Department makes any modification to the text of the proposed regulation that is substantial but still sufficiently related to the original proposed text as described in this Notice, the Department will make the modified text (with changes clearly indicated) available to the public for at least 15 days before adopting the proposed regulations as modified. The Department will accept written comments regarding modified regulations for 15 days after the date upon which they are made available to the public. Please send requests for copies of any modified regulations to the Department at the address indicated above.

AVAILABILITY OF THE FINAL STATEMENT OF REASONS

Upon completion, copies of the Final Statement of Reasons may be obtained by contacting the Department at the above address.

AVAILABILITY OF DOCUMENTS ON THE INTERNET

Copies of the Notice of Proposed Action, the Initial Statement of Reasons, and the text of the regulation in underline and strikeout can be accessed through the Department's website at: <https://www.conservation.ca.gov/calgem/Pages/Oil,-Gas,-and-Geothermal-Rulemaking-and-Laws.aspx>

If you have any questions regarding the process for this proposed action, please contact the Department using the contact information provided above.