



October 23, 2014

Department of Conservation
801 K Street, MS 24-02
Sacramento, CA 95814
DOGGRRegulations@conservation.ca.gov
ATTN: Well Stimulation Regulations

Re: Public Comments: 2nd Revision of SB 4 Well Stimulation Treatment Regulations

To Whom It May Concern:

These comments on the Division of Oil Gas and Geothermal Resources's (DOGGR) second revision of its proposed regulations for well stimulation and fracking are submitted on behalf of the Sierra Club, Sierra Club California, and Sierra Club California's more than 380,000 members and active supporters.

The second revision fails to correct the many severe deficiencies Sierra Club and others identified in prior comments. Most importantly, DOGGR continues to propose regulations that will allow well stimulation to occur without providing any scientific or other information showing that these regulations can and will ensure that well stimulation does not pose serious risks to life, health, property, and the environment. Indeed, DOGGR has not shown that any possible regulations could avoid these risks. DOGGR's present course of drafting well stimulation regulations in the absence of and prior to a scientific inquiry regarding well stimulation is inconsistent with DOGGR's statutory obligations and basic principles of agency decision making. DOGGR must "prevent, as far as possible, damage to life, health, property, and natural resources."¹ Consistent with this mandate, DOGGR may only permit those "methods . . . of increasing the ultimate recovery of underground hydrocarbons" which DOGGR deems "suitable," and the only forms of production that may be used are those "methods or processes [that] have been approved by [DOGGR]."² Available information has shown that well stimulation and unconventional production pose significant risks to life, health, property, and the environment. Therefore, we continue to urge DOGGR to impose an immediate moratorium on fracking and well stimulation.

If DOGGR nonetheless permits well stimulation, the proposed regulations must be improved in a number of ways. We reiterate that DOGGR has unquestionable authority to adopt regulations more stringent than the floor set by the legislature in Senate Bill 4 and California Public Resources Code § 3160. In comments submitted on July 28, 2014, we identified numerous problems

¹ Cal. Pub. Resources Code § 3106(a).

² *Id.* § 3016(b).

with DOGGR's first revised proposal. With few exceptions, the second revised text fails to cure any of these deficiencies. Instead, the majority of the changes made in the second revision worsen the proposal, either by introducing needless ambiguity or by weakening important protections. We discuss some of our particular concerns below.

I. Permit and Review Process

We reiterate our prior comments regarding the need to:

1. provide the public with a clear outline of the entire permitting process,
2. limit single project authorization under § 1751 to 10 or fewer wells,
3. amend § 1783.2 and 1783.3 to require affirmatively informing neighbors of the application and environmental review processes, in addition to informing neighbors when actual drilling is contemplated
4. amend § 1783.3 to grant any person entitled to receive notification under § 1783.2 the right to water quality testing at the operator's expense, rather than treating neighboring tenants differently than neighboring landowners.

The second revision troublingly further weakened § 1783.3(b)(4)(A) by eliminating the requirement that operators "arrange follow-up [water quality] measurements to be taken between 30 and 60 calendar days after the well stimulation treatment is completed." While baseline, pre-stimulation testing at the operator's expense is essential, it is also important to provide post-stimulation testing to determine what changes, if any, occurred.

II. Definitions

The second revision continues to unlawfully exclude various treatments from the definition of "well stimulation treatment" despite these treatments' falling within the scope of the definitions provided by S.B. 4 and Public Resources Code § 3157. There is no basis for excluding activities such as gravel packing from the definition of well stimulation treatment, or for generally narrowing the definition of well stimulation treatment to encompass only "short and non-continual" processes.

Furthermore, rather than clarifying potential ambiguity regarding the overlap between well stimulation treatment and underground injection projects, DOGGR has further muddled the picture. As we previously explained, well stimulation techniques can be used on wells used for underground injection projects. DOGGR's proposed definition of an underground injection project includes "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." § 1761(a)(2). Where fluids injected in the course of such activity also increase permeability, the activity plainly also meets the statutory definition of "well stimulation treatment," as the statute defines "well stimulation treatment" to include "any treatment of a well designed to enhance oil and gas production or recovery by increasing the permeability of the formation." Public Resources Code § 3157(a). Tellingly, the statutory definition explicitly extends beyond hydraulic fracturing and acid well stimulation. DOGGR's proposed regulation appropriately recognizes that a "well stimulation treatment [can be] done on a well that is part of an underground injection project." §1761(b)(3).

The regulation improperly indicates, however, that DOGGR contends that an "underground injection project" cannot, itself, constitute a well stimulation treatment. This indication is found in §

1761(b) and, in the second revision, in §1761(a)(1)(A). Section 1761(a)(1) defines “well stimulation treatment,” and subparagraph (a)(1)(A) provides a general definition. 1761(a)(1)(A)(i) – (iii) then provide three clauses which illustrate fracturing, illustrate acidization, and state a DOGGR reporting requirement, respectively. The second revision inexplicably prefaces these clauses with “Except for operations that meet the definition of ‘underground injection project’ under Section 1761(a)(2).” Thus, DOGGR appears to indicate that *even if* a process otherwise meets the regulatory definitions of well stimulation provided by § 1761(a)(1)(A)(i) and (ii), to say nothing of the broader statutory definition of well stimulation, that process nonetheless does not constitute well stimulation if it also meets the definition of an underground injection project. This exclusion is unsupported and must be removed.

Even more confusing and unsupported is application of this new exclusion to § 1761(a)(1)(A)(iii). It appears that the purpose of clause (iii) is to require DOGGR to explain why treatments that would otherwise appear to meet the definition of well stimulation are not treated as such. This explanation is especially appropriate in precisely those cases where DOGGR determines that a process is not a well stimulation treatment because of the new exception, i.e., because it is also an underground injection project. But as worded, it appears that exception encompasses the obligation to report use of the exception itself, because the exception appears to apply to clause (iii) itself. Thus, at an absolute minimum, DOGGR must amend the regulation to make it clear that the language the second revision added to § 1761(a)(1)(A) does not apply to § 1761(a)(1)(A)(iii).

Separate from the definition of “well stimulation treatment,” DOGGR must explain the omission of the definition of “protected water” from § 1781(n). While the previously proposed definition was unreasonably narrow, as we explained in our prior comment, DOGGR should provide additional clarity regarding the scope of waters that are protected, or the process for determining which waters are protected.

III. Information Disclosure and Public Notice

We reiterate our concerns regarding information disclosure and public notice. The second revision does not cure, or even address, the deficiencies we identified in our previous comment.

The proposed regulations define “Chemical Disclosure Registry” to simply be the FracFocus website. § 1781(g). The legislature explicitly and specifically instructed DOGGR to use FracFocus only as an interim measure pending development of a state disclosure website. Pub. Resources Code § 3160(g)(2)(B). FracFocus suffers numerous limitations that make it an inappropriate substitute for mandatory public disclosures: it is ill-suited to prior disclosure, it does not provide information in aggregate and machine-readable forms (and has terms of use that prohibit such aggregation), and it does not meet appropriate standards for public data integrity and retention. The proposed regulations violate a clear legislative command to use a system other than FracFocus as soon as possible.

Section 1783.2 should be revised to extend the period between neighbor notification and well stimulation treatment to 45 calendar days, to ensure adequate opportunity for baseline water testing. Similarly, the period in which a property owner may request water quality testing, pursuant to proposed § 1783.3(a), should be extended from 20 to 30 days.

Tenants, in addition to property owners, must be afforded the right to request water quality testing at the operator's expense pursuant to § 1783.3(a)-(c). At a minimum, tenants must have a right to request water quality testing by a designated contractor for water sampling selected by the operator pursuant to § 1783.3(b)(4)(A).

Finally, § 1788 should be revised to emphasize that full transparency and public disclosure must be DOGGR's baseline regulatory approach. In the event that DOGGR determines that public disclosures are not required pursuant to Public Resources Code section 3234, DOGGR must provide written documentation for the basis of that decision. In all instances where information is available prior to any well stimulation, disposal or related activities, that information shall be required to be reported to all relevant authorities and disclosed to the public prior to those activities taking place.

IV. Response to Potential Breach

DOGGR must clarify the second revision's changes to § 1787. We tentatively support the requirement to engage in "diagnostic testing" in addition to "monitoring." We support requiring affirmative investigation, in addition to mere passive data collection, when there is evidence of a potential breach. The change in terminology appears consistent with this preference, but neither DOGGR's existing nor proposed regulations define these terms.

Other aspects of § 1787 require significant improvement. The regulation only requires protected measures when evidence demonstrates "that a breach *has* occurred" (emphasis added), but DOGGR must not allow an operator to postpone protective action until a breach has been demonstrated with certainty. Instead, protective actions should be required once a risk of breach has been established. Once the obligation to take protective action is triggered, the operator must be required to "immediately take all appropriate measures to prevent contamination..." in addition to taking the specific steps enumerated by § 1787(b) of the second revision. That is, DOGGR should reinstate this language from the first revision's § 1787(a), but as a catch-all remainder obligation, rather than the sole obligation.

V. Seismic Monitoring

The second revision inexplicably relaxes the seismic monitoring and reporting requirements. Whereas the first revision set a threshold of 2.0 on the Richter for both monitoring and cautionary action, the second revision raises this to 2.7. DOGGR has not provided any basis for concluding that this threshold is adequately protective. Even if DOGGR were to conclude, wrongly, that the cautionary measures provided in § 1785.1(b)(2) and (3) did not need to be taken unless a magnitude 2.7 or greater event was observed, the monitoring obligation in § 1785.1(a) could be set at a lower level, and should be coupled with a recording and reporting obligation in § 1785.1(b)(1). We reiterate, however, that even the magnitude 2.0 threshold was too high, and that 1.0 represents a better threshold. In addition, the reporting period and area should be extended to 14 days and 14 times the ADSA, respectively.

VI. Conclusion

Thank you for your attention to this letter. We look forward to the Division's response to our comments.

Sincerely,

A handwritten signature in blue ink that reads "Kathryn Phillips". The signature is written in a cursive style.

Director
Sierra Club California

A handwritten signature in black ink that reads "Nathan Matthews". The signature is written in a cursive style.

Nathan Matthews
Staff Attorney
Sierra Club Environmental Law Program