#### OFFICE OF THE CITY MANAGER



# CITY OF CULVER CITY

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October 24, 2014

Via E-Mail: DOGGRRegulations@conservation.ca.gov

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Department of Conservation Office of Governmental and Environmental Relations Attn: Well Stimulation Regulations

801 K Street, MS 24-02 Sacramento, CA 95814

Subject: Comments to the SB 4 Well Stimulation Treatment Regulations

**Second Revised Text of Proposed Regulations** 

#### Dear Sir or Madam:

The City of Culver City submits the following comments to the second revised proposed "SB 4 Well Stimulation Treatment Regulations" circulated on or about October 9, 2014. These regulations are of particular concern to the City and its residents because the Inglewood Oil Field is within and adjacent to the City. The City appreciates the changes of the Department of Conservation, Division of Oil, Gas and Geothermal Resources (collectively "DOGGR") has made to the proposed regulations since its prior versions. This letter includes new comments in response to your Second Revised Text of Proposed Regulations. It also includes previous City comments from prior versions, which DOGGR did not address in this Second Revised Version. If DOGGR determines that it will not make any or all of the suggested revisions below, the City requests a response from DOGGR explaining the reasons for such a determination.

Furthermore, the City continues to believe there are immediate measures that should be taken to protect public health, safety and the environment during the process for adoption of these regulations. Therefore, the City continues to support a moratorium on hydraulic fracturing until after: (1) DOGGR completes the certification of its EIR and the environmental, public health and safety impacts from well stimulation are fully analyzed; (2) these regulations are revised, finalized and become effective after receiving appropriate public comment; and (3) DOGGR has all the necessary means to enforce the regulations.

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The City's comments are as follows:

## I. Comments to Specific Regulatory Provisions

#### Section 1782 - General Well Stimulation Treatment Requirements

**Subsection (b):** The requirement that the operator shall "follow the intent of all applicable well construction requirements" should be revised to require the operator "to follow all applicable well construction requirements." Whether an operator is following the "intent" is very subjective and does not ensure compliance with the requirements.

### Section 1783 - Application for Permit to Perform Well Stimulation Treatment

**Subsection (c):** The municipality and any other local agencies with jurisdiction or if the wellhead is located within 1500 feet of the local jurisdiction should also be provided with copies of the permit application of well stimulation occurring within its jurisdiction or within 1500 feet of its jurisdiction.

**Subsection (d)**: The municipality and any other local agencies with jurisdiction should also be notified concurrent with the Division prior to the commencement of any well stimulation within its jurisdiction or if the wellhead is located within 1500 feet of the local jurisdiction.

# <u>Section 1783.1 – Contents of Application for Permit to Perform Well Stimulation Treatment</u>

The municipality and any other local agencies with jurisdiction or if the wellhead is located within 1500 feet of the local jurisdiction should be notified in a timely manner of any applications pursuant to this section and their comments invited.

Information regarding the city where the well is going to be located should be included.

**Subsection (28):** Any substances used in well stimulation fluids should be disclosed to the municipality and any other local agencies with jurisdiction or if the wellhead is located within 1500 feet of the local jurisdiction regardless of any claim of trade secret.

#### Section 1783.2 - Neighbor Notification, Duty to Hire Independent Third Party

The municipality and any other local agencies with jurisdiction or if the wellhead is located within 1500 feet of the local jurisdiction should receive a sample copy of all Neighbor Notifications submitted with a list of the addressees if the notices are

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sent to surface property owners and tenants within and immediately adjacent to its jurisdiction.

**Subsection (a)(2):** An easy-to-understand map of the proposed well stimulation location should also be included with the notification. The Neighborhood Notification Form should be revised to reflect this change.

**Subsection (c)**: Well stimulation should not commence until 45 calendar days after all required notices are provided to provide notified parties with adequate time to raise any concerns that they may have regarding the well stimulation. The Neighborhood Notification Form should be revised to reflect this change.

**Subsection (j)**: If any additional surface property owners or tenants are provided notice after the original declaration, the time period under Subsection (c) upon which well stimulation shall commence should be re-calculated from the date of the last notice provided to ensure that all interested parties have a fair opportunity to raise any concerns with the proposed well stimulation. This provision shall not be applicable to surface property owners or tenants that are not required to be notified under the provisions of Subsection (a)(1).

### Section 1783.3 – Availability of Water Testing, Request for Water Testing

A DOGGR ombudsman should be designated on DOGGR's website to provide assistance to parties receiving the Neighbor Notification, including assistance on requesting water testing.

**Subsection (b)(4)(A)**: A notified surface property owner should be given thirty (30) calendar days from the date notice is provided to request water quality testing. The Neighborhood Notification Form should be revised to reflect this change.

**Subsection (b)(5)**: All costs of conducting water quality testing should be paid by the operator. The word "reasonable" should be struck.

**Subsection (b)(6)**: The municipality and any other local agencies with jurisdiction or if the wellhead is located within 1500 feet of the local jurisdiction should also receive copies of any water quality testing results.

**Subsection (d):** If the surface property owner declines to request water quality testing, a tenant should be entitled to request the same options as the surface property owner for water quality testing, including reimbursement by the operator for the testing. However, only one request for water quality testing for each property should be reimbursed.

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#### Section 1784 -Well Stimulation Treatment Area Analysis and Design

Subsection (a)(3): The review of all faults (active or inactive) should be more carefully spelled out. In addition to including known faults, the review should include any faults that can be identified with reasonable diligence. Operators that have conducted any subsurface seismic testing should be required to provide any data suggesting or demonstrating such faults. The purpose of such diligence must not be limited to "geologic and hydrologic isolation of the oil and gas formation" but also for the potential that well stimulation activity might trigger a seismic event. Any such analysis must include not only the potential for single well stimulation activities to trigger such a seismic event, but the cumulative effect of past and future well stimulations causing a seismic event. The analysis should include the potential impacts on nearby structures, particularly ones which may be closer, older (not up to current seismic standards), or other circumstances that may increase the risk of property damage or personal injury. Where there is an identifiable risk (e.g. 1 in 100,000) of triggering a seismic event (either from a single activity or cumulative activity), the regulations should require a second round of review and approval by third party seismic experts and/or USGS before any well stimulation activity can proceed. In any instance where the risk of property damage or personal injury is identified, both DOGGR and the local agency exercising jurisdiction over the location or if the wellhead is located within 1500 feet of the local jurisdiction must be notified.

**Subsection (a)(4):** The second sentence, which states "The operator shall assess the mechanical rock properties, including permeability, relative hardness (using Young's Modules), 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" should also apply to Subsection (3).

### Section 1784.2 - Cement Evaluation Prior to Well Stimulation Treatment

**Subsection (c)**: DOGGR should not have the discretion to allow an operator not to conduct the cement testing.

## Section 1785 - Monitoring During Well Stimulation Treatment Operations

The operator should log and provide to DOGGR all data collected pursuant to this section regardless of whether any of the events in Subsection (b) occur. Relying entirely on the operator to self-report the problems described in Subsection (b) provides too much room for potential underreporting and does not give DOGGR the opportunity to enforce such underreporting.

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Deleted subsections (d)(3)(A) though (C) and (4) and (5) should be restored. The information that must be specified in the removed sections would be relevant, material and important to any analysis of the potential impacts and consequences of a well breach.

# <u>Section 1785.1 – Monitoring and Evaluation of Seismic Activity in the Vicinity of Hydraulic Fracturing</u>

Subsections (a) & (b): The subsections should be revised to require monitoring of earthquakes of a magnitude of 2.0 or greater.

**Subsection (b)(1)**: The municipality and any other local agencies with jurisdiction or if the wellhead is located within 1500 feet of the local jurisdiction should also be notified immediately of any seismic activity.

**Subsection (b)(2):** The results of the evaluation in Subsection (b)(2) should be transmitted to the municipality and any other local agencies with jurisdiction or if the wellhead is located within 1500 feet of the local jurisdiction.

# <u>Section 1786 – Storage and Handling of Well Stimulation Treatment Fluids and Wastes</u>

**Subsection (a)(5):** DOGGR and the municipality and any other local agencies with jurisdiction or if the wellhead is located within 1500 feet of the local jurisdiction should be notified within twenty-four (24) hours of any unauthorized release of fluids containing hazardous substances, if not earlier notified pursuant to this subsection.

Subsection (a)(6): The municipality and any other local agencies with jurisdiction or if the wellhead is located within 1500 feet of the local jurisdiction should also receive the written report.

**Subsection (a)(8):** The first sentence should be reinstated because determining whether fluids are hazardous waste is important to understand the well stimulation treatment fluid used.

# <u>Section 1787 – Well Monitoring After Well Stimulation Treatment</u>

**Subsection (a):** The operator should be required to provide DOGGR and the Regional Water Board with immediate notification of any well failure prior to any diagnostic testing to put them on notice of an issue. The subsection should be revised to include this provision again. The Regional Water Board should also be provided with any diagnostic testing results.

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Former Subsection (b)(2): The requirement that the operator report the information on the monitoring to DOGGR should be reinstated. This will provide an important metric to determine when and how much well stimulation fluid is recovered or left in place.

**Subsection (b)(3):** The deleted language should be restored. The deleted language requires the operator to "take all appropriate measures to prevent contamination of" underground and surface waters. It is inconceivable as to why this requirement would not be imposed on an operator that has caused a well breach.

**Subsection (d)(3):** DOGGR should not be provided with the authority to waive the requirement for a pressure relief device. Such device should be included in all wells.

#### Section 1788 - Required Public Disclosures

**Subsection (a):** The public disclosure should be made within 30 days of cessation. In addition to the matters included in the section, the following should also be subject to public disclosure: the unauthorized release of any well stimulation treatment fluids, the matters set forth in section 1785(b) indicating breach or other significant problems, or indication of problems arising from the well stimulation treatment.

Any hazardous substances used in well stimulation fluids should be disclosed to the public regardless of any claim of trade secret.

**Subsection (b):** The language states that the operator shall post the information listed in the Chemical Disclosure Registry, "to the extent that the website is able to receive the information." What does that refer to? What occurs if the website cannot receive it regarding public disclosure of that information?

**Subsection (c):** In addition to state agencies, the municipality and other local agencies with jurisdiction or if the wellhead is located within 1500 feet of the local jurisdiction should be able to receive the information that is not publicly disclosed.

#### Section 1789 - Post-Well Stimulation Treatment Report

Former Subsection (b): This subsection should not have been removed. The operator should be required to disclose seismic information in the report.

#### II. Seismic Issues

As part of its permit application, the operator should be required to conduct an evaluation of the potential for well stimulation treatments to trigger seismic activity

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that may be a danger to persons or property. Such an evaluation should include not only the potential impacts from a single hydraulic fracturing event, but also should assess the impacts of cumulative activity. It is our understanding that multiple small earthquakes can ultimately trigger larger one. The operators need to evaluate the risk of minor and major seismic events so that DOGGR can determine whether approval should be granted. The evaluation should be conducted by an independent geologist qualified in the field. The operator should be required to provide the geologist with all relevant information available to it including all data collected during any seismic survey, testing or analysis of the oil field regardless of any claim of trade secret.

Although the proposed regulations do not cover "underground injection projects" or "subsurface injection or disposal projects," the City believes it is extremely important and relevant to also evaluate and regulate the seismic impacts of such operations.

#### III. Conclusion

The City appreciates the efforts DOGGR has taken to regulate well stimulation. However, more needs to be done to protect the public's health and safety and the environment. We urge DOGGR to consider these comments and revise the proposed regulations accordingly. The City has not had the opportunity to obtain a full technical evaluation of the regulations and reserves the right to comment further as additional information becomes available. The City supports any additional measures proposed by other commenters and/or DOGGR that are reasonably likely to make well stimulation activities more protective of public health and safety and the environment and reserves the right to supplement its comments. In addition, if DOGGR determines that it will not make any or all of the suggested revisions above, the City requests a response from DOGGR explaining the reasons for such a determination.

Sincerely,

Martin R. Cole, MPA

Assistant City Manager/City Clerk

Martin R. Cole

cc: The Honorable Mayor and Members of the City Council

John M. Nachbar, City Manager