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May 29, 2015

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor [95814]
P.O. Box 100
Sacramento, CA 95812-0100
commentletters@waterboards.ca.gov



RE: Comment Letter on State Water Resources Control Board's Draft Model Criteria for Groundwater Monitoring in Areas of Oil and Gas Well Stimulation

Dear Ms. Townsend:

Chevron is a California-based integrated oil and gas exploration and production company, and is the largest oil and gas producer in the state of California. Most of Chevron's oil and gas production in the state comes from our San Joaquin Valley Business Unit, which is headquartered in Bakersfield, and consists of production operations primarily in Kern, Kings, Fresno, and Monterey counties.

Chevron is pleased to provide comment on the State Water Resources Control Board's (Water Board) Draft Model Criteria for Groundwater Monitoring in Areas of Oil and Gas Well Stimulation dated April 29, 2015 (draft Model Criteria), developed pursuant to Senate Bill 4 (SB 4). Additionally, Chevron supports the comments submitted by the Western States Petroleum Association on the draft Model Criteria.

We recognize the major efforts made by the Water Board to develop a groundwater monitoring program that meets the requirements of SB 4, ensuring well stimulation activities in California continue to be safe and protective of groundwater resources, public safety, and the environment. However, in order for an effective, but not overly burdensome, program to be put in place, we believe the Water Board should revise the draft criteria in consideration of the following.

Existing Safeguards to Protect Groundwater

A range of existing laws, statutes, regulations, and leading industry best practices are in place with the designed purpose to protect groundwater resources. Through specific programmatic elements such as permitting, well design and construction, plugging, and abandonment requirements, and associated reporting and agency oversight, these elements have delivered an effective environmental performance.

The Division of Oil, Gas, and Geothermal Resources (the Division) has now implemented comprehensive regulations under SB 4 that require additional rigorous testing and evaluation before, during, and after well stimulation treatment (WST) operations to ensure that well and geologic formation integrity is ensured and associated activities remain protective of human health and the environment. Under these regulations, the Division is notified of WST well integrity issues, in which case the WST must cease immediately and repairs must be conducted in real-time.

Chevron recommends that the Model Criteria reflect the existence of these proven safeguards and the information such safeguards provide as to the risk of contamination. The Model Criteria should be revised to include risk-based design methods that adjust the intensity of groundwater monitoring to the specific site situation.

Chevron supports the recommendations by WSPA to include the parameters of the axial dimensional stimulation area (ADSA) as the spatial boundary of the WST, and its attributes relative to protected waters informing the intensity of monitoring locations and the prioritization of aquifers to monitor. We also support the incorporation of WST performance information as a factor to adjust the resulting frequency and duration of monitoring within a plan.

Area-Specific Plan Flexibility

Chevron seeks clarity in the Model Criteria on how the requirement to install, at a minimum, one up-gradient and two down-gradient monitoring wells for each protected aquifer scales up to address multiple numbers of wells and aquifers in a given oilfield boundary. The Water Board looks to allow the flexibility and efficiencies, as scales increase, for an area-monitoring plan to equate to monitoring the perimeter or boundary of oilfields, for multiple wells.

Specific Recommendations

For multiple wells, application of the ½ mile horizontal distance criteria would relate to the associated polygon boundary of WST wells, rather than individual WST wells, when selecting up-gradient and down-gradient monitoring points.

For multiple aquifers, Chevron support's WSPA recommendations which propose wellbore monitoring requirements in conjunction with monitoring of the aquifer at highest risk. In the event of a wellbore failure; additional monitoring of the affected aquifer would be required.

Chevron strongly encourages the Water Board to reflect a risk based and flexible approach in the Model Criteria. We seek criteria that provide localized adjustment and reflect area-specific conditions, while retaining the integrity of the criteria at all scales.

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Chevron appreciates the opportunity to support the development of the final well stimulation regulation by providing comment to improve the operability of the regulations. Please contact Steven Arita at (916) 325-3000 for any follow up to these comments.

Sincerely,

A handwritten signature in blue ink, appearing to read "Steven Arita" with a stylized flourish at the end.

Michael Rubio

Manager

California Government Affairs