Frequently Asked Questions

Regarding Well Stimulation Regulations under
Senate Bill 4 (Pavley, Chapter 313, Statutes of 2013)

THE REGULATION PROCESS

Why are regulations necessary?

By its terms, most of SB 4 is required to be implemented in regulations to be developed by the Division of Oil, Gas and Geothermal Resources (Division), part of the Department of Conservation (Department). SB 4 requires that the implementing regulations be approved and go into effect by January 1, 2015.

When will the process of preparing implementing regulations begin, and how long will it take?

The formal "rulemaking" process will begin with release of the proposed implementing regulations on November 15, 2013. It is anticipated to take a year to complete.

Will the public have an opportunity to comment on these regulations?

The public will have a 60-day period to submit comments on the implementing regulations and attend one of five planned public hearings at various locations in the State. Starting Friday, November 15, written comments about the implementing regulations can be submitted to this email address:

DOGGRRegulations@conservation.ca.gov.

SB 4 becomes law in 2014, not 2015. Will there be any protections to cover well stimulation treatments before the 2015 implementing regulations take effect?

SB 4 includes a streamlined interim procedure to be used for a one-year period beginning in January, 2014, in which owners or operators may proceed with well stimulation treatments without a permit if they comply with specified provisions of the Act. The Division will use its emergency regulatory authority to set up rules for this 2014 interim process. It is anticipated that these emergency regulations will be filed with the Office of Administrative Law on December 13, 2013, and go into effect on January 2, 2014.

These frequently asked questions address only the implementing regulations expected to become effective on January 1, 2015. More information on the interim procedure will be released this December.

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PUBLIC DISCLOSURES

Will operators be required to obtain a permit to conduct well stimulation treatments?

Yes. Once the implementing regulations go into effect in 2015, they will require operators to obtain a permit and perform specific testing, evaluation, and analysis prior to commencing well stimulation treatments to ensure that the operations will not result in contamination of protected water. The permit will be good for a period of one year.

How will I know if a well near me will be getting a stimulation treatment?

There are three points at which notifications to neighbors and/or the general public will occur. First, SB 4 requires that operators notify property owners and tenants in advance of commencing stimulation operations. Next, it requires the information to be submitted to the Division, and the Division will post the information, including the location of the well, on its public website within five days of issuing a permit. The Division's website is at http://www.conservation.ca.gov/dog/Pages/Index.aspx Finally, the results of the stimulation operation, including chemicals used and their concentrations, are to be posted to FracFocus, as described immediately below.

Are companies required to disclose the chemical composition of the well stimulation treatment ?

SB 4 requires operators to publicly disclose detailed information about well stimulation treatments, including a complete list of chemicals used and their concentrations. SB 4 requires the Department to develop a website to provide chemical information to the public. Until this website is developed, operators are required to employ the FracFocus.org website (http://fracfocus.org/) to make the information available to the public. If the information is subject to a claim of trade secret, the operator is required to post the chemical family or similar descriptor for a chemical.

Can companies withhold information about what is in the well stimulation treatment fluid based upon a claim of trade secret?

Yes, but to a limited extent only, subject to Division review and court challenge. And even if the information is legitimately withheld as a trade secret, government agencies and health professionals can have access to the information.

In California, companies and individuals have a statutory right to protect trade secret information from public disclosure, but SB 4 put limitations on trade secret protection for well stimulation fluids. SB 4 provides a process for determining if a trade secret claim is valid and for public disclosure if it is determined the information is not a trade secret. The public has the right to challenge in court a trade secret claim. SB 4 also provides that even if the information is a protected trade secret, it must be disclosed to specified government entities, or for a health

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professional who reasonably believes that the information may be necessary in the diagnosis or treatment of a patient.

What is a "confidential" well and what information must be disclosed for a confidential well that will treated?

A very small subset of wells, less than 2%, may be exempt from disclosure because by statute they are "confidential" wells. Operators may request that certain information about a well be maintained as confidential. Confidential status allows operators an opportunity to utilize information obtained from a well without having to publicly disclose the information to a competitor. Confidential status applies to onshore wells for two years, subject to six month extensions; in no case may such status apply for longer than a total of 4 years. SB 4 includes a provision that requires disclosure of a proposed or completed stimulation treatment on a well, but not the chemical constituents used.

ENVIRONMENTAL PROTECTION

How do the proposed implementing regulations ensure that well stimulation will not contaminate water?

The proposed regulations prepared by the Department of Conservation's Division of Oil, Gas, and Geothermal Resources (Division) require rigorous testing and evaluation before, during, and after stimulation operations to ensure that wells and geologic formations remain competent and that drinking water is not contaminated. Some of the testing and evaluation requirements of the implementing regulations have not yet been implemented by any other state.

The implementing regulations require operators to evaluate the casing, tubing, and cement lining of the well borehole to ensure that the well's construction is more than adequate to withstand operations that are intended to increase the permeability of the hydrocarbon producing formation. In addition, operators are required to analyze the faults, natural fracture zones, and other wells in the area to ensure that they will not permit the migration of fluid to other zones. If there is any chance that the induced fractures would extend beyond the hydrocarbon zone being treated, the implementing regulations require evaluation of the intervening geological formations to ensure that there is a confining barrier between the hydrocarbon strata and any strata containing protected water, to prevent groundwater contamination. The implementing regulations also require operators to monitor and test the well during and after well stimulation treatment to verify that well failure has not occurred.

Can neighbors request that their water be tested?

Yes, the regulations enable neighbors to request baseline and follow-up testing of qualifying agricultural and drinking water wells. The implementing regulations require operators to

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provide information about planned well stimulation treatment to the appropriate Regional Water Quality Control Board and to notify owners and tenants of neighboring property prior to well stimulation treatment. SB 4 provides for baseline and follow-up testing of water wells as requested by property owners that have been notified that a well in their vicinity will be receiving a stimulation treatment. The test results will be provided to the requesting party, well operator, the Division, and the State Water Resources Control Board.

Will groundwater quality, and the water used in well stimulation, be monitored?

SB 4 includes requirements that (1) the State Water Resources Control Board develop a ground water monitoring program that operators have to comply with, and (2) that well operators develop a water management plan addressing the source, disposition and amounts of water used. The groundwater monitoring requirements become effective as soon as the law is implemented.

How will other regulatory agencies, such as the Air Resources Board, approach well stimulation treatments?

Other agencies will have a significant role in implementation of the statute . SB 4 provides for a study to be conducted to assess aspects of well stimulation treatments such as air quality, and for the Department to meet with the State's other regulatory entities to determine appropriate approaches to protecting air and water quality and safe handling of chemicals used in well stimulation, and to commit those approaches to agreements between such agencies.

How do the implementing regulations ensure that well stimulation fluids will be handled in a safe manner?

In 2011, the Division promulgated and implemented regulations to ensure that oilfield fluids are safely managed. Effective January 29, 2011, AB 1960 implementation regulations require secondary containment features around fluid containers, regular testing and maintenance of tanks and pipelines, and maintenance of a detailed spill contingency plan. In addition to these existing requirements, the implementing regulations would prohibit the storage of well stimulation fluids in unlined sumps or pits.

How do the implementing regulations address response to a spill or release of well stimulation fluids?

Various state and federal laws already require remediation and reporting of spills or releases of hazardous substances. A matrix of reporting requirements can be found on the CalEMA website here: http://www.calema.ca.gov/HazardousMaterials/Pages/Spill-Release-Reporting.aspx

SB 4 also requires operators to specifically include well stimulation treatment fluids in their spill contingency plans. The implementing regulations include this requirement as well as the requirement to cleanup spills in accordance with all applicable statutes and regulations.

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How do the implementing regulations address concerns that well stimulation treatments can induce seismic activity?

The proposed regulations require operators to report to the Division if an earthquake of magnitude 2.0 or greater occurs in the area of a recent well stimulation treatment. However, well stimulation is a short-duration production well treatment, and since 1947 in the United States, more than one million oil and gas wells have been stimulated with no recorded incidences of triggered earthquakes. By contrast, induced seismicity has been reported in connection with long-duration, high-volume injection of waste fluids in disposal wells. Such injection in California is covered by other regulations and is not addressed in SB 4.

What happens to the well stimulation fluids after the treatment occurs?

After the well stimulation operations are complete, much of the fluid comes back out of the well along with the oil, gas, and brackish water produced in the operation. In California, 80-90 percent of the water produced from oil wells is brackish water associated with the oil and gas in the geologic formation. The well stimulation fluid flowback is commingled with the fluids produced and is treated with those produced fluids. Most produced fluids in California are re-injected into oil and gas bearing zones to increase production. The remainder are injected into deep waste fluid disposal wells or processed. Wells used for sustained injection of oil and gas waste fluids for increased production or disposal already are regulated by the Division, including permitting, inspection, mechanical integrity testing, and plugging and abandonment oversight.

ENVIRONMENTAL REVIEW

Will there be an environmental impact report (EIR) prepared about well stimulation in California?

Yes. SB 4 requires the Division to prepare an EIR to evaluate and inform decision-makers and the public of potential environmental impacts of well stimulation in the state. The Division and Department will begin the process of "scoping" this document in late November of 2013. The scoping process will define the extent of coverage of the EIR within the parameters established under SB 4 and CEQA. SB 4 requires the EIR to be completed and certified by July 1, 2015.

Will there be an independent study prepared about well stimulation in California?

Yes. In addition to requiring an EIR, SB 4 requires the California Natural Resources Agency to prepare an independent study of well stimulation treatments, including hydraulic fracturing and acid well stimulation treatments, by January 1, 2015. The Natural Resources Agency is currently developing the scope of the study and will begin the analysis in December 2013 in anticipation of meeting the statutory deadline of January 2015.

WELL STIMULATION ACTIVITIES TAKING PLACE CURRENTLY

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Where is well stimulation reported to be happening?

From June 1 2012 through June 1, 2013, hydraulic fracturing voluntarily reported to the Division occurred primarily in established fields in Kern County. Of the 967 hydraulic fracturing procedures reported in that time, the majority (788) occurred in the Belridge and Lost Hills fields in western Kern County. The remainder occurred primarily in established oil production areas in Kern, Kings, Los Angeles and Ventura Counties.

The number of wells reported to have been hydraulically fractured, by oil field and county, are as follows:

Field	County	Number of Wells reported to be hydraulically fractured
Asphalto	Kern	2
Bardsdale	Ventura	2
Belridge, North	Kern	56
Belridge, South	Kern	647
Buena Vista	Kern	7
Elk Hills	Kern	71
Kettleman North Dome	Kings	1
Lost Hills	Kern	106
McKittrick	Kern	1
Midway-Sunset	Kern	4
Monument Junction	Kern	5
Paloma	Kern	1
Rose	Kern	13
Semitropic	Kern	1
Sespe	Ventura	11
Shafter, North	Kern	7
Shiells Canyon	Ventura	1
South Mountain	Ventura	1
Torrey Canyon	Ventura	1
Ventura	Ventura	4
Wilmington	Los Angeles	12

Thirteen hydraulically fractured wells were not within an identified field.

Acid matrix stimulation, another form of well stimulation covered in SB 4, has not been uniformly reported. This will change with SB 4 and the implementing regulations, which will make uniform reporting of all qualifying forms of well stimulation mandatory.

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