HALLIBURTON

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Stephen Flaherty
Director, State and Local Government Affairs

June 12, 2013

Senator Fran Pavley
Chair, Senate Committee on Natural Resources and Water
California Legislature
State Capitol, Room 4035
Sacramento, CA 95814

RE: Invitation to participate in informational hearing on well stimulation in the oil and gas fields of California

Dear Senator Pavley,

I am writing in response to your June 4, 2013 invitation to Halliburton Energy Services, Inc. to participate in your Committee's scheduled legislative informational hearing on well stimulation in the oil and gas fields of California. Thank you for the invitation. Unfortunately, Halliburton is unable to participate in the hearing scheduled for the afternoon of June 18th. This letter is in follow up to the oral notification provided to your chief of staff, Liz Fenton, on June 12th that Halliburton would be unable to attend the hearing, but would instead provide a written response to those topics you identify that are applicable to Halliburton. This letter is that written response.

As you know, Halliburton Energy Services, Inc. is an international service provider for many oil and gas field operators and Halliburton provides a variety of services to its customers, including certain well stimulation services. Halliburton has 35 facilities in California employing over 700 people, and last year paid annual wages exceeding $64 million and property taxes exceeding $1.3 million.

As a service provider, Halliburton assures its customers that its services comply with all applicable health and safety laws and regulations, and works with its customers to ensure that compliance. For example, all of Halliburton's services in California are subject to the requirements of the California and federal OSHA Hazard Communication Systems, which require that Material Safety Data Sheets (MSDS) for all hazardous materials present on the worksite be immediately available to all employees at the worksite, and that worksite training occur for all hazardous materials handled. This means that all well stimulation services that entail the presence of hazardous materials are fully disclosed at the worksite, including the identities or types of all hazardous materials and related hazard traits and workplace precautions. Further, Halliburton provides its MSDS to any person that requests them and makes them available to the public on its website.

I am sure you understand that as a matter of company policy and practice Halliburton does not speak to questions about the particular services it provides to, or the circumstances of, its individual customers. Understandably, customers prefer to speak for themselves about the operations they conduct and do not expect service providers they hire to address such topics. As a result, a number of the topics you identify in your invitation are best addressed by the entities that are conducting oil and gas field operations in California.

There are two topics you identify in your invitation relating to Halliburton trade secret information, however, that are appropriate for Halliburton to address in this letter. The topics are: Does Halliburton consider one or more of well stimulation additives to be trade secrets, and what is Halliburton's position on trade secret protection for additives?

In general, additives are created to serve certain functional purposes in the course of well stimulation, such as to control the viscosity of well stimulation fluids. Additives are usually comprised of water and various chemical and physical (*e.g.*, sand) ingredients, the identity of which for some ingredients may be trade secret information. Only certain ingredients are trade secret information and the majority are not. But because Halliburton has invested tens of millions of dollars in developing new additives with productive attributes, its intellectual property is an essential and valuable part of its services. In sum then, Halliburton does consider one or more of the ingredients of certain additives to be trade secrets.

Halliburton's position on the protection of trade secret information that is disclosed to California state agencies is set forth in the enclosed document. I believe it fully responds to the question you ask about Halliburton's position on trade secrets.

Halliburton appreciates your invitation to participate in the legislative informational hearing on June 18th and looks forward to working with you and your Committee in the future on the issues raised in your letter and other natural resource and water topics.

Yours truly,

Stephen A. Flaherty

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Director State and Local Government Affairs

Enclosure

Halliburton Position on the Protection of Trade Secret Information Disclosed to California State Agencies

This document summarizes Halliburton's position on trade secrecy protections that should be present in any California legislative or regulatory program mandating the disclosure of trade secret information to state agencies.

As an initial matter, Halliburton emphasizes that it strongly supports public disclosure of fracturing fluid ingredients In fact, Halliburton goes a step further than the law requires by disclosing the constituents and additives used in typical fracturing formulations on its website – and we present the information in a way that is easy for the public to follow and understand. At the same time, for the reasons set forth below, it is critical that the industry have the ability to protect its trade secrets while ensuring that regulators have all of the information they need to protect public health and respond to environmental incidents.

The protection of trade secret information disclosed to state agencies has two key elements:

1. Entities claiming trade secret protection must have a real opportunity to have a court determine the validity of their trade secret claims prior to any public disclosure; and

2. Agencies receiving claimed trade secret information must protect the information from unintentional public disclosure.

The need to protect trade secret information is real and growing.

As in any industry, protection of trade secrets related to hydraulic fracturing provides critical incentives for investment in innovation. Halliburton and other service companies spend millions of dollars annually on research to develop more effective and innovative hydraulic fracturing fluid products. This type of innovation provides critical benefits:

- Enhanced production – Innovation results in enhanced production of oil and gas. Proprietary products often result in an increase in oil and gas production when compared to the use of non-proprietary, commodity-type hydraulic fracturing technologies.

- Environmental benefits – Innovation also results in environmental benefits such as a reduction in overall chemical use, the use of chemicals with greater margins of environmental safety, reduced truck traffic, less packaging and storage of materials, and a smaller overall well pad footprint.

- Cost and efficiency benefits – innovation improves the overall cost-effectiveness of the fluid systems that Halliburton uses in its hydraulic fracturing operations and improves the efficiency of those operations, leading ultimately to lower energy costs for consumers.

The importance of protecting the intellectual property of US companies is highlighted in the recently released White House report "*Strategy on Mitigating the Theft of U.S. Trade Secrets.*"

That report states that the theft of physically and electronically stored trade secret information in the United States "is accelerating" and that government agencies "have roles in protecting trade secrets and preserving our nation's economic and national security."[1] The White House coupled its *Strategy* with a strong statement in the President's 2013 State of the Union warning government and businesses of the risk of inaction in the face of the rising threat to corporate trade secrets posed by cyber-attacks sponsored by foreign countries and companies.[2]

The President's admonition on the importance of protecting proprietary trade secret information is particularly true for hydraulic fracturing technical information. In a recent New York Times article on the hacking of American computer systems by the Chinese government, the paper reported that many recent cyber-attacks are "intended to steal fracking technologies, reflecting fears by the Chinese government that the shale energy revolution will tip the global energy balance back in America's favor. These facts are likely a significant motivation behind the wave of sophisticated attacks . . . ."[3] It is in the face of these sophisticated threats to trade secret information that Halliburton evaluates the protections built into government-mandated disclosures of that information.

Hydraulic fracturing chemical disclosure programs should include adequate protections for claimed trade secret information.

When California mandates the disclosure of trade secret information to state agencies, it should adequately protect the information claimed to be trade secret until a court has had the opportunity to decide whether the claimed trade secret is a trade secret protected by the current California Uniform Trade Secrets Act. This means ensuring that (1) any entity claiming trade secret protection has a real opportunity to defend that claim in court and that (2) claimed trade secret information is adequately protected from public disclosure pending that judicial determination.

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[1] *See,* http://www.whitehouse.gov/sites/default/files/omb/IPEC/admin_strategy_on_mitigating_the_theft_of_u.s_trade_secrets.pdf.
[2] *See,* http://www.c-span.org/uploadedFiles/Content/Documents/State-of-the-Union-2013.pdf.
[3] *See* http://www.nytimes.com/2013/03/04/us/us-weighs-risks-and-motives-of-hacking-by-china-or-iran.html?pagewanted=all&_r=1&

(1) There are two components needed to ensure that an entity has a real opportunity to defend its claim in court.

First. Agencies must provide actual notice to the owner of the trade secret when they plan to disclose claimed trade secret information, either by receiving written acknowledgement that the entity received the notice or by providing actual service of process. At present, some agencies only provide notice via mail that trade secret information is going to be disclosed. A mailed letter, even if provided through certified mail, is insufficient to ensure that a claimant has been notified that an agency is going to publicly release, and thereby destroy, claimed trade secret information that is potentially worth many millions of dollars.

Second. Once an entity receives actual notice that the claimed trade secret information is going to be publicly disclosed, the claimant should have 45 days to file suit in court for a determination of the validity of its claim of trade secret protection. If the entity does not file its suit and serve it on the state agency with that time period, the information may be publicly disclosed. Currently, many state agencies require that a claimant obtain a temporary restraining order and a preliminary injunction, sometimes within as little as 10 days after the posting of a letter regarding the agency's intent to disclose the information. Such a foreshortened procedure for judicial interim determination of a claim of trade secret protection does not ensure the swift resolution of a trade secrecy claim on its merits. In fact, those preliminary proceedings do not affect the timing of a decision on the merits. What they accomplish is to force both the agency and claimant to rush to court on short notice, after which the trade secrecy claim will be resolved on the merits on exact same timeframe as established by the court whether or not a preliminary injunction is sought. A foreshortened "10-day" procedure for TROs and preliminary injunctionsalso creates a trip-wire for unwary or unlucky claimants who see their valuable trade secrets disclosed before they can defend them in court. There is no benefit to the State of California from introducing procedural uncertainty and inefficiency into the protection of intellectual property.

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(2) *There are three components needed to ensure that trade secret information is adequately protected by State agencies from unintentional public disclosure.*

First. Agencies should be required to take all reasonable steps to protect claimed trade secret information including, but not limited to, adopting best practices for the physical and electronic protection of that information. As detailed by the federal government, there is a real threat that hydraulic fracturing information stored electronically will be the target of cyber-attacks from foreign governments or companies. Similarly, there is a risk that physical or electronic copies of claimed trade secret information that are not properly marked as trade secrets by the agency or that are not securely filed could be stolen or improperly disclosed to the public or competitors.

Second. Government entities that receive claimed trade secret information from the agency that first received the information must have the absolute duty to maintain the confidentiality of the information and to direct any PRA requests to the agency that originally compelled the disclosure of the claimed trade secret information. If government entities do not have an absolute duty to maintain the confidentiality of claimed trade secret information they receive from originating agencies, each will have the duty to independently evaluate the validity of the trade secrecy claim when faced with a Public Records Act request. This could result in a claimant having to defend its trade secrecy claim numerous times, under procedures that vary widely between government entities, which would introduce significant uncertainty to the protection of intellectual property and would be an inefficient use of government resources. Further, a receiving agency may not have adopted any regulations whatsoever governing its handling of trade secret information or PRA requests. Thus, trade secret information may be destroyed by the simple act of one agency providing it to another agency. Requiring government entities that obtain the information to protect it from disclosure and to direct PRA claims back to the originating agency ensures that the claim will be evaluated -- once -- by the courts and under procedures and standards known to the claimant at the time of disclosure.

Third. Any hydraulic fracturing disclosure program should incorporate the Cal/OSHA hazard communication system of disclosure of trade secret information to health professionals and their patients who they are treating for exposure to hazardous chemicals. Several current legislative proposals include alternative procedures for disclosure to health care providers and individuals of trade secret information that are so broad and vague as to allow an almost unlimited disclosure of trade secret information to and by health care providers, which is likely to end with the public disclosure of that information and the destruction of intellectual property. The existing Cal/OSHA hazard communication system for the disclosure of trade secret information is a well understood procedure for the disclosure of medically necessary chemical information to employees in California who are potentially exposed to hazardous chemicals.[4] That procedure should applied to all individuals that are exposed to hazardous chemicals, including any chemicals present in hydraulic fracturing fluids.

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[4] See 8 Cal. Code Regs. Section 5194, available at http://www.dir.ca.gov/title8/5194.html, adopted pursuant to Cal. Labor Code Section 6398.

Halliburton supports the government-mandated disclosure of trade secret hydraulic fracturing fluid information where Halliburton is afforded a real opportunity to have a court determine the validity of its claim of trade secret protection and where claimed trade secret information is adequately protected by state agencies from unintentional public disclosure. To that end, Halliburton has worked with the legislature and executive branch to ensure that any disclosure program fully protects claimed trade secret information.