



LEAGUE OF WOMEN VOTERS® OF CALIFORNIA

April 19, 2013

Mr. Tim Kustic
State Oil & Gas Supervisor
Division of Oil, Gas & Geothermal Resources
California Department of Conservation
801 K Street, MS 18-00
Sacramento, CA 95814-3530

Dear Supervisor Kustic:

The League of Women Voters of California (LWVC) submits this letter documenting concerns regarding the lack of rigorous oversight of the practice of hydraulic fracturing. This letter supplements concerns expressed by members of the LWVC at hearings and workshops regarding proposed regulatory approaches to protecting the public and environment from hydraulic fracturing activities. Before entering into a formal rule making process later this year, we hope that you will revise your approach to address these concerns. Also, we may have additional concerns as the Division of Oil, Gas & Geothermal Resources (DOGGR, or Division) provides more details about its proposed strategy for the wise development of oil and natural gas "through sound engineering practices that protect the environment, prevent pollution, and ensure public safety" and using hydraulic fracturing (fracking).

- **Status of Industry Activities and Research:** We are uncomfortable that much of the data provided by the Division has been of a very general nature. We believe that the Division needs to gather necessary data and publish a more precise description of industry activities in California, specifying the numbers and locations of active, inactive, and abandoned petroleum and gas wells, along with the number and location of wells previously and currently undergoing hydraulic fracturing. (See also comments below about problems with Geotracker.)

Furthermore, we have observed that there is disagreement in several areas about the status of industry activities. For example, there is disagreement about the extent to which the industry in California uses multi-stage and horizontal fracturing. As another example, there is disagreement concerning the rate of casing failure. See also our concerns about the level of understanding concerning seismic risk. We strongly believe that the Division needs to consider data presented by all interested parties, and share the Division's data, methodology, results, and recommendations with interested parties.

- **Full Disclosure of Hazardous Materials:** The LWVC advocates for timely and complete disclosure of chemicals used in the fracking process, especially toxic chemicals and other hazardous materials.¹ By timely, we mean a reasonable period prior to hydraulic fracturing, in a manner that allows active regulatory oversight

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¹ Regarding disclosure of hazardous materials, see also our testimony to DOGGR by Dr. Linda Phillips on May 30, 2012 (attached).

and opportunity for community involvement, prior to injection (see below). If trade secrets are claimed, then they should be handled in a manner consistent with trade secret regulations for other hazardous materials (see HSC Section 25511). Whether DOGGR or other agencies, necessary information must be available without delay for emergency responders and public agencies in case of an accident, spill, or release. Public health and other medical personnel must have immediate access to the information in case of emergencies, or of longer-term exposure such as air or drinking water contamination. The public should also have the right to request release of trade secret information, again with conditions consistent with HSC 25511 (the operator has the burden of proof if they want to deny the information release).

- **Community Involvement:** We are concerned that the public will not have reasonable opportunity to comment at key decision-making points in the process of approving hydraulic fracturing activities. We understand that the Division intends to merely post notices of pending fracking on its Web site, and with very short notice (as little as 3 days). Clearly, from input at the workshops this past month, the public—especially those urban communities such as Culver City and the Los Angeles neighborhoods near Baldwin Hills—would be disenfranchised without a higher level, more timely, and more robust form of notification and opportunity to comment. Should the practice of hydraulic fracturing continue in California, we urge the Division to expedite development of a user friendly database or alternative means of communication with the public (such as your email lists for regulatory updates) that provides for opportunity for full citizen participation and that recognizes the roles of local agencies.

Furthermore, the Division recently advised that Geotracker, a groundwater Web site at the State Water Resources Control Board, contains useful information. However, we have surfed that Web site and find that, for what little information is posted on hydraulic fracturing, it is incomplete, imprecise, cumbersome to find, and extremely user un-friendly.

- **Seismic Risk:** As has been discussed elsewhere, injection (for fracking and for disposal of wastewaters) into deep zones at high pressure has the risk of inducing earthquakes. We have considered the Division's assurances that operators will not inject at pressures exceeding the natural fracture limit in the long term, or for sustained injection periods. However, we are not clear that pressure thresholds for injection and timing thresholds are well understood and controlled.
- **Wastewater:** Neither the existing nor the proposed regulations encompass a cradle-to-grave approach for fracking fluids and other wastewaters, and we recommend that the Division tighten the regulations to enable careful accounting of the generation, handling, and disposal of all exploration and production wastes (including fracking fluids).

Furthermore, we understand that the State Water Resources Control Board has testified that there are Waste Discharge Requirements (WDRs) for 70 oil fields in California. However, are these WDRs specifically for handling and disposal of injected fluids? Or do these WDRs regulate other waste streams, such as stormwater and landfarming operations?

Also, what is the status of the Memorandum of Understanding between the Division and the SWRCB? Has this been reviewed and updated recently, and have specific and stable funding

and adequate levels of the funding been provided for the SWRCB to participate in oversight of hydraulic fracturing? What is the source of this funding?

- **Structure of Proposed Permitting Program:** We conclude, as highlighted below, that the proposed permitting approach to hydraulic fracturing is loose, difficult to enforce, and most likely underfunded.
 - **Limited Liability of Entity Subject to Permitting and Regulations:** We recommend that both the owner of the well and the hydraulic fracturing operator be subject to regulations, and that subsequent owners and operators be liable for full compliance with all regulations and permit conditions. Testing and monitoring may not immediately, or within a five-year period, reveal problems with injection of chemicals, in particular in wells used for unconventional fracking and also in wells used for conventional fracking into zones where a vertical gradient may be sufficient to cause slow, upward migration (vertical leakage) through cap rocks.
 - **Identification of Waterbody at Risk:** We recommend that, in notifying the public and local agencies, notification specify all surface waters and groundwater at risk—i.e., those waters that may be hydraulically connected in case of inadequate well design and construction, casing failure, leaks, spills, and/or operator error.
 - **Confidential Wells:** Hazardous materials disclosure for confidential wells should be consistent with that for other trade secrets. The information must be submitted to the agency and available instantly for emergency response, as well as to public health and medical personnel when needed. Also, to put this in perspective, how many wells currently under the Division's oversight are deemed confidential?
 - **Definition of Protected Water:** We disagree with the proposed definition, which excludes waters with total dissolved solids (TDS, or salts) above 3,000 milligrams per liter. In some cases, these salts may be the result of contamination from oil exploration or production activities, or other activities that released contaminants. Regardless, we believe that, to be consistent with the State Water Resources Control Board policy on Sources of Drinking Water, an aquifer or inland waterbody with a high TDS cannot be disregarded as a potable water, unless a Regional Board has specifically amended its Basin Plan to exclude domestic and municipal use (MUN) as a designated beneficial use.
 - **Notice of Intent (NOI):** We believe that regulators should actively approve applications (NOIs and HF-1 forms), and actively oversee monitoring during and after hydraulic fracturing activities—especially in light of the reliance on self-reporting by the industry, which should be required to be full, accurate, and timely (see also below). Notice to local agencies, landowners, nearby residents, and affected agencies must be timely as well; we suggest 30 days before fracking begins, to allow for public input as well as for baseline water monitoring.
 - **Qualifications of Operators:** The proposed regulations rely, to a very high degree, upon full, accurate, and timely reporting by operators. However, the proposed regulations fail to specify professional standards for the operators. We recommend that the regulations be

tightened to specify that, at a minimum, activities, data collection, evaluations, etc., be conducted by, or under direct supervision of, professional engineering geologists and/or engineers under license by the California Board for Professional Engineers, Land Surveyors, and Geologists.

- **Enforcement:** We are concerned that the Division has a poor track record of enforcement, and we are concerned that the Division has underestimated staffing levels (including legal staff) for oversight and enforcement of the proposed regulations. At the workshops, Division representatives stated that they had the ability to impose fines of up to \$25,000. Has the Division been imposing such fines?
- **Funding:** Are fees being charged for hydraulic fracturing oversight activities adequate? With the stress on the state budget and difficulty in allocating general funds for environmental activities, the owners and operators of hydraulic fracturing should bear the cost of oversight.
- **Abandoned Wells:** Improperly abandoned wells can be conduits for migration of hazardous fluids and contaminants. To what extent has the Division been able to locate abandoned wells? Assuming that many wells have been abandoned by the industry (prior to regulatory requirements), we have additional concerns about the presence of abandoned wells (and potential pathways for migration of hazardous fluids, and also seismic risk).

Thank you for this opportunity to comment. We would be pleased to respond to any questions you may have about our comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Jennifer A. Waggoner". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Jennifer A. Waggoner, President
League of Women Voters of California