



SIERRA CLUB VENTANA CHAPTER

P.O. BOX 5667, CARMEL, CALIFORNIA 93921

CHAPTER OFFICE • ENVIRONMENTAL CENTER (831) 624-8032

May 8, 2013

Timothy Kustic
State Oil and Gas Supervisor
Department of Oil, Gas, and Geothermal Resources ("DOGGR")
801 K Street, MS 20-20
Sacramento, CA 95814
Tim.Kustic@conservation.ca.gov

Mark Nechodom, Director
Department of Conservation
801 K Street, MS 24-01
Sacramento, CA 95814
Jason.Marshall@conservation.ca.gov

Dear Mr. Kuscik and Mr. Nechodom:

Thank you for scheduling a public hearing in Monterey on April 30 to review the "discussion draft" for improving permitting and monitoring of hydraulic fracturing or "fracking" at your agency. Local residents are very concerned with the short and long term affects of fracking on the environment especially as it potentially could impact air quality, water supply and seismic activity. As you know, Sierra Club is a plaintiff in a lawsuit challenging your agency for not doing the kind of analysis and oversight that we believe drilling permits demand.

Across the country fracking has been associated with severe public health and environmental effects and risks, including the use and contamination of large amounts of water pumped into the wells, contamination of domestic and agricultural water supplies, emission of hazardous air pollutants and methane, surface spills of toxic fracking chemicals and fluids before, during and after fracking operations, the inhalation of silica dust, environmental degradation, loss of habitat for native plants and wildlife and the potential to induce seismic activity, a unique concern in California, one of the nation's most seismically active states.

The meeting last week provided an opportunity to work on the deficiencies in your regulations and many suggestions and improvements were put forward by both by speakers and in written form. However, we recognize that the hearings on the "discussion draft" does not initiate a formal rulemaking process, but rather is only a starting point for discussion by key stakeholders including industry, the environmental community, other regulators and the public.

This has the appearance of a very long process with an uncertain resolution, so the Sierra Club and over 200 environmental organizations, health professionals, labor, farmers and other groups

...To explore, enjoy, preserve and protect the nation's forests, waters, wildlife and wilderness...

have signed on to letters in favor of a legislative moratorium on fracking to protect public health and the environment while more work is done.

Below are comments on the current "discussion draft" submitted by the Ventana Chapter (Monterey and Santa Cruz counties) on the inherent dangers of fracking as it relates to the 1750 square mile area of Monterey shale. Sierra Club has over 200,000 members and supporters in California who may live in or near, use, or intend to use, areas in California affected by fracking.

The following are our specific concerns about the discussion draft regulations:

Advance Notification

This topic in the discussion draft cites that the operator's data and other details of the fracturing operation be submitted to the regional water quality control boards and water supply agencies within the jurisdiction at least 10 days before commencing fracturing. This time period is not long enough to ensure review by these over burdened boards and would require at least a 90 day advance notification. The other time period included in the draft-- notice to the Division of 24 hours-- is also too short, and should be lengthened to at least 7 days.

Monitoring During and After Fracturing Operations

Nothing in the discussion draft describes when and if DOGGR will send its own agency inspectors to active well sites, "slickwater" discharge pits, and injection wells. This may not be regarded by you as a code issue, but the authority (and obligation) to inspect without prior notice is fundamental to effectively protecting the public interest.

Your agency needs to clarify its intent to be on site during drilling operations to ensure the regulations are followed. This includes the subsequent multiple horizontal borings and explosive perforations that are all part of this new technology. There is no substitute for the presence of inspectors on site. Large fracking well sites are industrial in scale. They can access square miles of subsurface strata. This industry must be obligated to pay permit fees sufficient to cover the cost for effective regulatory oversight.

Furthermore, your discussion draft cites Public Resources Code Section 3106(a) which mandates that DOGGR "supervise the drilling, operation, maintenance, and abandonment of wells and the operation, maintenance, and removal or abandonment of tanks and facilities attendant to oil and gas production . . . so as to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil and gas deposits from infiltrating water and other causes; loss of oil, gas, or reservoir energy, and damage to underground and surface waters suitable for irrigation or domestic purposes by the infiltration of, or the addition of, detrimental substances." DOGGR's current pattern and practice of issuing permits to conduct well operations without notification of tracking or monitoring the practice of hydraulic fracturing is a violation of Public Resources Code sections 3106(a).

Disclosure of Materials Used in Fracturing Fluid (Under Use of Trade Secret Information)

The disclosure requirements concerning chemicals used during hydraulic fracturing in the DOGGR discussion draft as they pertain to incidences of poisoning are included below.

Section 1788.2 (b) specifies how information could be accessed by doctors attempting to treat poisoning victims.

(b) The holder of information withheld as trade secret pursuant to Section 1788.1 shall identify the specific identity and amount of any chemicals claimed to be a trade secret to any health professional who, in the scope of his or her professional duties, requests the information in writing, if the health professional executes a confidentiality agreement and provides a written statement of need for the information indicating all of the following:

(1) The information is needed for the purpose of diagnosis or treatment of an individual;

(2) The individual being diagnosed or treated may have been exposed to a hazardous chemical;

(3) Knowledge of the information will assist in the diagnosis or treatment of the individual. (c) If a health professional determines that a medical emergency exists and the specific identity and amount of any chemicals claimed to be a trade secret pursuant to Section 1788.1 is necessary for emergency treatment, then the holder of information withheld as trade secret shall immediately disclose the information to the health professional upon a verbal acknowledgment by the health professional that the information may not be used for purposes other than the health needs asserted and that the health professional shall maintain the information as confidential. The holder of information withheld as trade secret may request, and the health professional shall provide upon request, a written statement of need and a confidentiality agreement from the health professional as soon as circumstances permit.

Draft Rules are Not Adequately Responsive to Matters of Public Health and Safety

We are aware of State Civil Code section 3426.1 (and 1788.1 pertaining to medical professionals) that define "trade secrets" and their secrecy protection on behalf of polluting industries. Nonetheless the text of the discussion draft seems to offer nothing that would alleviate this problem. DOGGR and the State Department of Conservation are fully aware that numerous highly toxic chemicals are used in hydraulic fracturing and are then discharged into open pits or pumped into tanker trucks. This highly polluted water is often re-injected into old, essentially abandoned wells. It thus passes through ground water basins used for drinking water and irrigation. Old wells often have cracked or corroded casings and / or old cement casing plugs that break down and lead to the pollution of ground water. DOGGR seems to be prepared to rely far too much upon the regulated industry to decide if these old wells are safe for the convenient dumping of toxic fluids ("Non-freshwater fluids").

Storage, Handling and Disposal of Hydraulic Fracturing Fluids

This new drilling technology has polluted ground water in Pennsylvania, Wyoming, and in other states. Instances of the intentional dumping of "frackwater" are accumulating and a criminal investigation is underway in Ohio where polluted "frackwater" was discovered being dumped into a road-side ditch.

DOGGRs effort to address the control and disposal of used Fracking Fluids (otherwise called "slickwater" or "frackwater"), or what DOGGR refers to as "non-freshwater fluids"), is limited to one statement in the draft: "Non-freshwater fluids" associated with hydraulic fracturing operations shall not be stored in unlined sumps or pits."

The proposed regulations neither describe nor define any new requirements detailing how these very large volumes of polluted water are to be disposed of. There is no reference regarding the prevention of rainwater flooding of disposal pits and no suggestion as to how long this polluted water can remain exposed to the atmosphere. Open pits will release gas benzene and other highly toxic VOCs into the air. If DOGGR believes that effective code already exists to address these issues, then DOGGR should make that clear in its "discussion draft".

Public Disclosure

DOGGR bears a direct responsibility to address the threat to ground water from used frackwater spills and well injection disposal. The agency must propose the adoption of exceptions to 3426.1 and 1788.1 that would both require the disclosure of all the chemicals used, their volumes, and the manner of their disposal or treatment.

No polluted fracking waste water should ever be re-injected into old exhausted well bores as a disposal method. Unlike the older practice of the disposal of crude oil contaminated drilling discharge water, hydraulic fracturing includes the use of an elaborate mix of chemicals that are artificially introduced where they did not exist before.

No physician attempting to treat a poisoning victim in an emergency should have to contend with the time consuming steps that DOGGR proposes in order to even know the possible chemicals with which his patient has been poisoned! Delays in the treatment of poisoning victims that could be caused by these requirements for confidentiality agreements (written or emergency verbal) could result in the death of poisoning victims.

Claims of Trade Secrets

It is our contention the issue of chemical disclosure is crucial to public health. It appears as if oil and gas companies do not wish the public to view a list of the chemicals they use and thus to understand the grave threats posed to public health and water resources.

Keeping these chemicals a secret is in large part about the Public Relations problems of the oil and gas industry, rather than about trade secrets. There are only a few operators in California with the equipment necessary to hydraulically fracture wells and conduct horizontal boring. For

all any member of the public knows, these companies may be freely sharing information between themselves about the effectiveness of various fracking chemicals. In any case, their mere assertion of "trade secret" must not supersede the public's right to know.

If California law needs to be changed, then your agency should recommend amendments in the law and push back strongly against this industry's reluctance to disclose its threats to public and environmental health.

Well Stimulation not an Injection Project-Neglect to use Current Law and Code to Protect the Public Interest

Quoting from the discussion draft: "1781. Well stimulation not an injection project. Well stimulation operations, including hydraulic fracturing, are not underground injection or disposal projects and are not subject to Sections 1724.6 through 1724.10."

We disagree. Hydraulic fracturing is quite obviously a form of underground injection. The entire point of fracking is to force proppants, chemicals and often diesel fuel deep underground, and as such, DOGGR has the statutory authority to regulate this activity according to these existing UIC or Underground Injection Control code sections.

Again we do not accept that underground injection is a safe method of toxic fluid disposal, and the fact that DOGGR seems reluctant to even use its own existing safety codes to protect the public interest is cause for additional concern.

Statements regarding the Reach of Fracturing Fluids into Zones of "Protected Water"

The discussion draft purports to control and regulate the subsurface distance between hydraulically fractured rock strata and natural rock faults and ground water bearing rock strata. In reality, this is illusory. There is no reliable means (short of tagging fracking water with radioactive tracers) to have any idea how close the polluting fracturing fluids get to ground water bearing rocks. Seismic testing and subsequent computer analysis are not sufficiently accurate. The earth is full of unseen faults and fractures and other channels (such as old basalt intrusions) that can transmit water between different layers in the bedrocks. The only way to discover if ground water has been contaminated is to test the water before and after fracking. Hydraulic fracturing permits must include a requirement for ground water testing both before and after drilling and fracturing operations. This water testing must continue on a defined schedule until the well is spent and sealed.

Inducement of Seismic Activity

DOGGR rejects the hypothesis that hydraulic fracturing induces hazardous earthquake activity. We believe the opposite is true, and that this poses particular concern in seismically prone California. A June 2012 report by the National Research Council of the National Academies of Science established a connection between high-pressure underground injection of fracking wastewater and seismic activity. Small temblors have been reported in Arkansas, Ohio,

from the British Columbia Oil and Gas Commission found that fluid injection during Hydraulic Fracturing in proximity to pre-existing faults resulted in dozens of seismic events in the Horn River Basin of northeast British Columbia between 2009 and 2011.

Conclusion

The controversy over the regulation of hydraulic fracturing and related horizontal boring technologies has now reached the State of California. This has occurred after these new oil and gas production technologies have already been employed extensively in other states and in Canada over the past few years.

This provides California with the unique opportunity to learn from mistakes already made in other parts of North America. Bills are pending in the CA State Legislature to establish a moratorium on the permitting of new wells that will use these hydraulic fracturing technologies. The Sierra Club supports such a moratorium to allow for a thorough, independent, and publicly financed survey and analysis of the impacts that hydraulic fracturing has had in other parts of the continent. This is crucial. Instead of allowing a rush to drill new fracking wells, California has the time to establish a regulatory structure that will protect the people and the natural resources of this state. We support this approach and will continue to follow this issue very closely.

We welcome your response to this letter.

Thank you.

Sincerely,



Kevin Collins
Chapter Energy Committee



Rich Fox
Chapter Energy Committee

Cc: Secretary John Laird
Deputy Secretary Gerald Meral
Congressman Sam Farr
Senator Bill Monning
Assembly member Luis Alejo
Assembly member Mark Stone
Supervisor John Leopold
Supervisor Dave Potter
Supervisor Simon Salinas
Mike Novo, Monterey County Planning Director