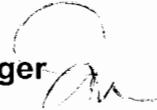


**MOORPARK CITY COUNCIL  
AGENDA REPORT**

**TO:** Honorable City Council

**FROM:** Jennifer Mellon, Administrative Services Manager



**DATE:** May 22, 2013 (CC Meeting of 6/5/13)

**SUBJECT:** Consider Taking a Position on SB 4: Oil and Gas: Hydraulic Fracturing (Fracking)

**BACKGROUND**

Staff brought forth this item for consideration on May 15, 2013, and was requested to continue the item in order to gather additional information regarding hydraulic fracturing (fracking). Senator Fran Pavley (D) has introduced SB 4 - Oil and gas: hydraulic fracturing and has requested support from cities. The bill in its entirety, Attachment 1, is a regulatory bill requiring the fracking industry to adhere to specific guidelines as well as other reporting, permitting, testing, and notification policy. Attachment 2 is Senator Pavley's fact sheet regarding SB 4.

**DISCUSSION**

Staff has read the bill and while it is difficult to find a nexus to local government with SB 4 and the bill does not specifically fit into the City of Moorpark Legislative Program, staff understands the concerns raised by SB 4 and regulation of fracking within California and the potential impacts in Ventura County which is why staff is bringing the bill forward for Council consideration.

The Ventura County Board of Supervisors (Board) met on December 11, 2012 to discuss Hydraulic Fracturing and request a report back from the County Executive Officer and County Council. In his letter, Board Member Bennett references concerns with fracking of both new and old wells in California's Monterey Shale formation, which is present in Ventura County as well as points out numerous environmental and health concerns being raised regarding fracking. Board member Bennett's letter is Attachment 3.

The County of Ventura staff and Division of Oil, Gas, and Geothermal Resources (DOGGR) made a subsequent presentation to the Board on April 9, 2013 regarding Hydraulic Fracturing of Oil and Gas Wells in Ventura County. Eight questions were posed to county staff and DOGGR by the Board and were addressed in the report, Attachment 4. In brief summary, please refer to the attachment for complete

information, the questions were answered as follows: 1) There is no regulatory requirement that fracking locations and/or chemicals be disclosed in California; however, there is a website [www.frackfocus.org](http://www.frackfocus.org) where information can be found that is requested to be voluntarily provided by oil and gas companies who are fracking within the state. 2) According to the voluntary information provided, 13 wells are being fracked in Ventura County and the average amount of water reported used is less than 300,000 per well. In total, Ventura County Public Works has identified approximately 200 fracked sites in Ventura County over the past decade. The City of Moorpark Community Development Department states there are less than 10 wells within city limits all located in the eastern Campus Park area; however, Occidental Petroleum has a Conditional Use Permit that allows drilling in undeveloped areas from Broadway all the way through the eastern city limit boundary. 3) The waste water produced by fracking is disposed of in the same reservoir it came from upon being separated from the oil, cleaned and filtered. 4) According to County Counsel, the County generally may regulate land uses and waste water disposal within its jurisdiction; however, these powers have limits. The County can regulate the surface components of these activities but the County does not have the power to directly regulate subsurface aspects of fracking, waste water disposal, or fracking of new wells. 5) The Monterey Shale Formation is located beneath substantial portions of Ventura County. 6) It is anticipated that not more than 15 wells will be fracked during 2013. 7) Current State regulatory efforts include nine bills before the California State legislature that deal with fracking. 8) Research regarding a link between fracking and earthquakes is in its infancy in large part due to the fact that there have been no reports of induced seismic activity from fracking in California.

At the Board of Supervisors meeting of May 21, 2013, the issue of Hydraulic Fracturing was again on the Agenda. The agenda item, Attachment 5, was titled, "Recommendations of Supervisor Bennett and Supervisor Parks to direct the County Executive Office and Resource Management Agency Director to revise the Conditional Use Permit (CUP) application form/questionnaire to ask whether fracking will be performed, what hazardous materials will be used in the drilling/post drilling operation, where the water supply for drilling and post-drilling operation, including fracking will be taken from, and where any liquid wastes will be disposed; direct the County Counsel to provide the Board with a confidential legal analysis of options available to address antiquated oilfield CUPs that do not require discretionary review for new drilling, and/or do not incorporate current ordinance requirements, and/or do not provide time limits; direct County Counsel to provide the Board with a confidential legal analysis of whether the county may restrict the use of fresh water in oilfield operations or require the use of non-fresh water when discretionary permits are issued for oil or gas well drilling or operation; and direct County Counsel to provide the Board with a confidential legal analysis of whether the county may require the use of non- or least-toxic fracking chemicals." The Supervisors are proposing pre-emptive measures to make Ventura

County regulations similar to Santa Barbara County by potential revisions of the CUP requiring disclosure while the State continues to move forward with regulations. The Supervisors recommendation was passed 4 – 1 and the item will be brought back. County Staff was directed to produce a draft conditional use permit questionnaire including language on fracking.

Senator Pavley's office has received numerous support and oppose letters regarding SB 4 which are included as Attachment 5. Among the support letters received, those from Ventura County include the Ventura County Board of Supervisors, Mayor Pro Tem Carmen Ramirez of Oxnard, and City of Ventura Councilman Brian Brennan.

Reasons cited to support SB 4 include the need for regulations regarding fracking; full disclosure of all chemicals used in fracking as well as the source, volume, composition, and disposition of water used and recovered; a direct an independent scientific study be conducted by January 1, 2015; that permitting be required for fracking; establishment civil penalty provisions; expansion of public notification prior to fracking; and baseline and follow-up testing of groundwater be conducted. Reasons cited to oppose SB 4 include that the legislation is not strong enough; the need to impose limits on water usage should be included; the need to impose a moratorium immediately until studies are complete; issues with trade secret privacy for the oil and gas industry; that additional bureaucracy makes California unfriendly to business; that a moratorium in 2015 is unreasonable and will hurt California economy; and that the legislation is premature and will circumvent the Governors effort for comprehensive fracking regulations.

The League of California Cities currently has a watch position on SB 4 due to their inability to link the legislation to impact on local government. Currently, as of May 23, 2013, SB 4 is in the in the Senate Appropriations Suspense File; the 1st House Fiscal Committee. Committee voting on SB 4 to date has been: Senate Nat. Resources & Water 4/9/13 (Y:6, N:2, A:1); Senate Environmental Quality 5/1/13 (Y:6, N:2, A:1); Senate Appropriations Committee Pass as Amended 5/20/13 (Y:6, N:0, A:1).

#### **FISCAL IMPACT**

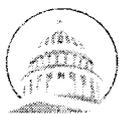
There is no fiscal impact.

#### **STAFF RECOMMENDATION**

Direct staff as deemed appropriate.

Honorable City Council  
June 5, 2013 Regular Meeting  
Page 4

Attachment 1: SB 4 Senate Bill Amended in Senate May 7, 2013  
Attachment 2: Fact Sheet: SB 4  
Attachment 3: Ventura County Board of Supervisors Letter dated December 11, 2012  
Attachment 4: Ventura County Staff Report dated April 9, 2013  
Attachment 5: Ventura County Staff Report dated May 21, 2013  
Attachment 6: Numerous Support and Oppose Letters regarding SB 4



**SB-4 Oil and gas: hydraulic fracturing.** (2013-2014)

AMENDED IN SENATE MAY 07, 2013

AMENDED IN SENATE APRIL 24, 2013

AMENDED IN SENATE MARCH 11, 2013

CALIFORNIA LEGISLATURE— 2013–2014 REGULAR SESSION

**SENATE BILL**

**No. 4**

**Introduced by Senator Pavley**  
**(Coauthor(s): Senator De León, Leno, Monning)**  
**(Coauthor(s): Assembly Member Stone)**

**December 03, 2012**

**An act to amend Sections 3213, 3215, 3236.5, and 3401 of, and to add Article 3 (commencing with Section 3150) to Chapter 1 of Division 3 of, the Public Resources Code, relating to oil and gas.**

LEGISLATIVE COUNSEL'S DIGEST

SB 4, as amended, Pavley. Oil and gas: hydraulic fracturing.

(1) Under existing law, the Division of Oil, Gas, and Geothermal Resources in the Department of Conservation, or the division, regulates the drilling, operation, maintenance, and abandonment of oil and gas wells in the state. The State Oil and Gas Supervisor, or supervisor, supervises the drilling, operation, maintenance, and abandonment of wells and the operation, maintenance, and removal or abandonment of tanks and facilities related to oil and gas production within an oil and gas field regarding safety and environmental damage. Existing law requires an operator of a well, before commencing the work of drilling the well, to obtain approval from the supervisor or district deputy. Existing law requires the operator of a well to keep, or cause to be kept, a careful and accurate log, core record, and history of the drilling of the well. Within 60 days after the date of cessation of drilling, rework, or abandonment operations, the owner or operator is required to file with the district deputy certain information, including the history of work performed. Under existing law, a person who violates any prohibition specific to the regulation of oil or gas operations is guilty of a misdemeanor.

This bill would define, among other things, the terms hydraulic fracturing and hydraulic fracturing fluid. The bill would require the Secretary of the Natural Resources Agency, on or before January 1, 2015, to cause to be conducted an independent scientific study on hydraulic fracturing treatments. The bill would require an operator of a well to record and include all data on hydraulic fracturing treatments, as specified. The bill would require the division, *in consultation with the Department of Toxic Substances Control, the State Air Resources Board, the State Water Resources Control Board, the Department of Resources Recycling and Recovery, and any local air districts and regional water quality control boards in areas where hydraulic fracturing treatments may occur,*

on or before January 1, 2015, to adopt rules and regulations specific to hydraulic fracturing, including governing the construction of wells and well casings and full disclosure of the composition and disposition of hydraulic fracturing. The bill would require an operator to apply for a permit, as specified, with the supervisor or district deputy, prior to performing a hydraulic fracturing treatment of a well and would prohibit the operator from either conducting a new hydraulic fracturing treatment or repeating a hydraulic fracturing treatment without a valid, approved permit. The bill would prohibit the approval of a permit that presents an unreasonable risk or is incomplete. The bill would require the division, within 5 business days of issuing a permit to commence hydraulic fracturing, to provide a copy to specific boards and entities and to post the permit on a publicly accessible portion of its Internet Web site. The bill would require the hydraulic fracturing treatment to be completed within one year from the date that a permit is issued. The bill would require the division to perform random periodic spot check investigations during hydraulic fracturing treatments, as specified. The bill would prohibit the supervisor or district deputy, as of January 1, 2015, from issuing a permit to commence a hydraulic fracturing treatment, as specified, until the study is completed and peer reviewed by independent scientific experts. The bill would require the operator to provide a copy of the approved hydraulic fracturing treatment permit to specified property owners at least 30 days prior to commencing a hydraulic fracturing treatment. The bill would require the operator to provide notice to the division at least 72 hours prior to the actual start of the hydraulic fracturing treatment in order for the division to witness the hydraulic fracturing treatment. The bill would require the supplier, as defined, of the hydraulic fracturing treatment to provide to the operator, within 30 days following the conclusion of the hydraulic fracturing, certain information regarding the hydraulic fracturing fluid. The bill would require the operator, within 60 days of the cessation of hydraulic fracturing treatment, to post or cause to have posted on an Internet Web site accessible to the public specified information on the fracturing and fluid, as specified. The bill would provide that where the division shares jurisdiction over a well with a federal entity, the division's rules and regulations govern the hydraulic fracturing treatment of a well. The bill would require a supplier claiming trade secret protection for the chemical composition of additives used in the hydraulic treatment to disclose the composition to the division, in conjunction with a hydraulic fracturing treatment permit application, but would, except as specified, prohibit those with access to the trade secret from disclosing it. Because a violation of this bill would create a new crime, it would impose a state-mandated local program.

(2) Under existing law, a person who violates certain statutes or regulations relating to oil and gas well operations is subject to a civil penalty not to exceed \$25,000 for each violation.

This bill would make persons who violate specified provisions relating to hydraulic fracturing subject to a civil penalty of not less than \$10,000 and not to exceed \$25,000 per day per violation.

(3) Existing law imposes an annual charge upon each person operating or owning an interest in an oil or gas well in respect to the production of the well which charge is payable to the Treasurer for deposit into the Oil, Gas, and Geothermal Administrative Fund. Existing law further requires that specific moneys from charges levied, assessed, and collected upon the properties of every person operating or owning an interest in the production of a well to be used exclusively, upon appropriation, for the support and maintenance of the department charged with the supervision of oil and gas operations.

This bill would allow the moneys described above to be used for all costs associated with hydraulic fracturing including scientific studies required to evaluate the treatment, inspections, and any air and water quality sampling, monitoring, and testing performed by public entities.

This bill would require the supervisor, on or before January 1, 2016, and annually thereafter, to transmit to the Legislature and make available publicly a comprehensive report on hydraulic fracturing in the exploration and production of oil and gas resources in the state.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: yes

**THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:**

**SECTION 1.** The Legislature finds and declares all of the following:

(a) Hydraulic fracturing of oil and gas wells in combination with technological advances in oil and gas well drilling are spurring oil and gas extraction and exploration in California.

(b) Insufficient information is available to fully assess the science of the practice of hydraulic fracturing in California including environmental, occupational, and public health hazards and risks.

(c) Providing transparency and accountability to the public regarding hydraulic fracturing, associated emissions to the environment, and the handling, processing, and disposal of hydraulic fracturing and related wastes is of paramount concern.

**SEC. 2.** Article 3 (commencing with Section 3150) is added to Chapter 1 of Division 3 of the Public Resources Code, to read:

**Article 3. Hydraulic Fracturing**

**3150.** "Additive" means a substance or combination of substances added to a base fluid for purposes of preparing a hydraulic fracturing fluid. An additive may, but is not required to, serve additional purposes beyond the transmission of hydraulic pressure to the geologic formation. An additive may be of any phase and includes proppants.

**3151.** "Base fluid" means the continuous phase fluid used in the makeup of a hydraulic fracturing fluid. The continuous phase fluid may include, but is not limited to, water, and may be a liquid or a hydrocarbon or nonhydrocarbon gas. A hydraulic fracturing treatment may use more than one base fluid.

**3152.** "Hydraulic fracturing" means a well stimulation or well completion treatment that involves the pressurized injection of hydraulic fracturing fluid and proppant into an underground geologic formation in order to fracture the formation, thereby causing or enhancing, for the purposes of this division, the production of oil or gas from a well.

**3153.** "Hydraulic fracturing fluid" means a base fluid mixed with physical and chemical additives for the purpose of hydraulic fracturing. A hydraulic fracturing treatment may include more than one hydraulic fracturing fluid.

**3154.** "Proppants" means materials inserted or injected into the underground geologic formation that are intended to prevent fractures from closing.

**3155.** "Supplier" means an entity performing a hydraulic fracturing treatment or an entity supplying an additive or proppant directly to the operator for use in a hydraulic fracturing treatment.

**3156.** "Surface property owner" means the owner of real property as shown on the latest equalized assessment roll or, if more recent information than the information contained on the assessment roll is available, the owner of record according to the county assessor or tax collector.

**3160.** (a) On or before January 1, 2015, the Secretary of the Natural Resources Agency shall cause to be conducted an independent scientific study on hydraulic fracturing treatments. The scientific study shall evaluate the hazards and risks and potential hazards and risks that hydraulic fracturing treatments pose to natural resources and public, occupational, and environmental health and safety. The scientific study shall do all of the following:

(1) Follow the well-established standard protocols of the scientific profession, including, but not limited to, the use of recognized experts, peer review, and publication.

(2) Identify areas with existing and potential conventional and unconventional oil and gas reserves where hydraulic fracturing treatments are likely to spur or enable oil and gas exploration and production.

(3) Evaluate all aspects of hydraulic fracturing, including, but not limited to, the hydraulic fracturing treatment, additive and water transportation to and from the well site, mixing and handling of the hydraulic fracturing fluids and additives on site, wastewater and waste hydraulic fracturing fluid handling, treatment, and disposal.

(4) Consider, at a minimum, atmospheric emissions, the potential degradation of air quality, potential water and surface contamination, induced seismicity, and the ultimate disposition, transport, transformation, and toxicology of hydraulic fracturing fluids, and waste hydraulic fracturing fluids in the environment.

(5) Include a hazard assessment and risk analysis addressing occupational and environmental exposures to hydraulic fracturing treatments and hydraulic fracturing treatment-related processes and the corresponding impacts on public health and safety with the participation of the Office of Environmental Health Hazard Assessment.

(6) Clearly identify where additional information is necessary to inform and improve the analyses.

(b) (1) On or before January 1, 2015, the division, *in consultation with the Department of Toxic Substances Control, the State Air Resources Board, the State Water Resources Control Board, the Department of Resources Recycling and Recovery, and any local air districts and regional water quality control boards in areas where hydraulic fracturing treatments may occur*, shall adopt rules and regulations specific to hydraulic fracturing. The rules and regulations shall include, but are not limited to, revisions, as needed, to the rules and regulations governing construction of wells and well casings to ensure integrity of wells, well casings, and the geologic and hydrologic isolation of the oil and gas formation during and following hydraulic fracturing, and full disclosure of the composition and disposition of hydraulic fracturing fluids and waste hydraulic fracturing fluids.

(2) Full disclosure of the composition and disposition of hydraulic fracturing fluids shall, at a minimum, include:

(A) The date of the hydraulic fracturing treatment.

(B) A complete list of the names, Chemical Abstract Service (CAS) numbers, and maximum concentration, in percent by mass, of each and every chemical constituent of the hydraulic fracturing fluids used. If a CAS number does not exist for a chemical constituent, the well owner or operator may provide another unique identifier, if available. Chemical information claimed as a trade secret, pursuant to subdivision (j), shall be identified as such and reported as described in subdivision (j).

(C) The trade name, the supplier, and a brief description of the intended purpose of each additive contained in the hydraulic fracturing fluid.

(D) The total volume of base fluid used during the hydraulic fracturing treatment, and the identification of whether the base fluid is water suitable for irrigation or domestic purposes, water not suitable for irrigation or domestic purposes, or a fluid other than water.

(E) The source, volume, and specific composition and disposition of all water, including, but not limited to, all water used as base fluid during the hydraulic fracturing treatment and recovered from the well following the hydraulic fracturing treatment that is not otherwise reported as produced water pursuant to Section 3227.

(F) The specific composition and disposition of all hydraulic fracturing fluids, including waste fluids, other than water.

(G) Any radiological components or tracers injected into the well as part of, or in order to evaluate, the hydraulic fracturing treatment, a description of the recovery method, if any, for those components or tracers, the recovery rate, and specific disposal information for recovered components or tracers.

(H) The radioactivity of the recovered hydraulic fracturing fluids.

(I) The location of the portion of the well subject to the hydraulic fracturing treatment and the extent of the fracturing surrounding the well induced by the treatment.

(3) The rules and regulations shall be revised to incorporate the results of the independent scientific study conducted pursuant to subdivision (a).

(c) (1) The rules and regulations adopted pursuant to paragraph (1) of subdivision (b) shall delineate the existing statutory authority and regulatory responsibility relating to hydraulic fracturing of the Department of Toxic Substances Control, the State Air Resources Board, any local air districts, the State Water Resources Control Board, *the Department of Resources Recycling and Recovery*, any regional water quality control board, and other public entities. The division shall additionally delineate how the respective authority, responsibility, and notification and reporting requirements associated with hydraulic fracturing treatments and hydraulic fracturing treatment-related activities is divided among each public entity.

(2) On or before January 1, 2015, the division shall enter into formal agreements with the Department of Toxic Substances Control, the State Air Resources Board, ~~any~~ local air districts where hydraulic fracturing treatments may occur, the State Water Resources Control Board, *the Department of Resources Recycling and Recovery*, and any regional water quality control board where hydraulic fracturing treatments may occur, clearly delineating respective authority, responsibility, and notification and reporting requirements associated with hydraulic fracturing treatments and hydraulic fracturing treatment-related activities in order to promote regulatory transparency and accountability.

(3) The agreements under paragraph (2) shall specify the appropriate public entity responsible for air and water quality monitoring *and the safe disposal of materials in landfills*, include trade secret handling protocols, if

necessary, and provide for ready public access to information related to hydraulic fracturing treatments and related activities.

(4) Any party to an agreement under paragraph (2) shall revise its regulations, if necessary, to reflect the agreement.

(d) (1) Notwithstanding any other law or regulation, prior to performing a hydraulic fracturing treatment on a well, the operator shall apply for a permit to perform a hydraulic fracturing treatment with the supervisor or district deputy. The permit application shall contain the pertinent data the supervisor requires on printed forms supplied by the division or on other forms acceptable to the supervisor. The information provided in the permit application shall include, but is not limited to, the following:

(A) The well identification number and location.

(B) The time period during which the hydraulic fracturing treatment is planned to occur.

(C) An estimate of the amount of water to be used in the treatment and its source.

(D) A complete list of the names, Chemical Abstract Service (CAS) numbers, and estimated concentrations, in percent by mass, of each and every chemical constituent of the hydraulic fracturing fluids planned to be used in the treatment. If a CAS number does not exist for a chemical constituent, the well owner or operator may provide another unique identifier, if available. Chemical information claimed as a trade secret, pursuant to subdivision (j), shall be identified as such and reported as described in subdivision (j).

(E) The planned location of the hydraulic fracturing treatment on the well bore and the estimated length, height, and direction of the induced fractures.

(2) (A) The supervisor or district deputy shall review the hydraulic fracturing treatment permit application and may approve the permit if the application is complete.

(B) A hydraulic fracturing treatment or repeat hydraulic fracturing treatment shall not be performed on any well without a valid permit that the supervisor or district deputy has approved.

(C) A permit describing a hydraulic fracturing treatment that presents unreasonable risk or is incomplete shall not be approved.

(3) The hydraulic fracturing treatment shall be completed within one year of the issuance of the permit.

(4) Within five business days of issuing a permit to perform a hydraulic fracturing treatment, the division shall provide a copy of the permit to the appropriate regional water quality control board or boards and to the local planning entity where the well, including its subsurface portion, is located. The division shall post the permit on the publicly accessible portion of its Internet Web site.

(5) At least 30 calendar days prior to commencing a hydraulic fracturing treatment, the operator shall provide a copy of the approved hydraulic fracturing treatment permit to every surface property owner or authorized agent of that owner whose property line location is one of the following:

(A) Within a 1,500 foot radius of the wellhead.

(B) Within 500 feet from the horizontal projection of all subsurface portions of the designated well to the surface.

(6) (A) A property owner notified pursuant to paragraph (5) may request the regional water quality control board to perform water quality sampling and testing on any water well suitable for drinking or irrigation purposes and on any surface water suitable for drinking or irrigation purposes as follows:

(i) Baseline measurements prior to the commencement of the hydraulic fracturing treatment.

(ii) Followup measurements after the hydraulic fracturing treatment on the same schedule as the pressure testing of the well casing of the hydraulically-fractured well.

(B) The regional water quality control board may contract with an independent third party that adheres to board -specified standards and protocols to perform the water sampling and testing.

(7) The regional water quality control board shall retain and archive sufficient sample collected pursuant to paragraph (6) to permit a reasonable number of additional analyses.

- (8) The operator shall provide the division with a list of the entities and property owners notified pursuant to paragraphs (4) and (5).
- (9) The operator shall provide notice to the division at least 72 hours prior to the actual start of the hydraulic fracturing treatment in order for the division to witness the treatment.
- (e) On and after January 1, 2015, the supervisor or district deputy shall not issue a hydraulic fracturing treatment permit for any well until the independent scientific study in subdivision (a) is completed and peer reviewed by independent scientific experts.
- (f) If a hydraulic fracturing treatment is performed on a well, a supplier that performs any part of hydraulic fracturing or provides additives directly to the operator for a hydraulic fracturing treatment shall furnish the operator with information needed for the operator to comply with subdivision (g). If a supplier claims trade secret protection pursuant to subdivision (j), the supplier shall notify the operator and provide to the operator substitute information, as described in subdivision (j), suitable for public disclosure. This information shall be provided as soon as possible but no later than 30 days following the conclusion of the hydraulic fracturing treatment.
- (g) (1) Within 60 days following cessation of a hydraulic fracturing treatment on a well, the operator shall post or cause to have posted to an Internet Web site designated or maintained by the division and accessible to the public, all of the hydraulic fracturing fluid composition and disposition information required to be collected pursuant to rules and regulations adopted under subdivision (b), including well identification number and location.
- (2) The division's Internet Web site shall be operational by January 1, 2016, and the division may direct reporting to an alternative Internet Web site developed by the Ground Water Protection Council and the Interstate Oil and Gas Compact Commission in the interim. The reported information shall be organized on the division's Internet Web site in a format, such as a spreadsheet, that allows the public to easily search and aggregate, to the extent practicable, each type of information required to be collected pursuant to subdivision (b) using search functions on that Internet Web site.
- (h) The operator is responsible for compliance with this section.
- (i) (1) All geologic features within a distance reflecting an appropriate safety factor of the fracture zone and having the potential to either limit or facilitate the migration of fluids outside of the fracture zone, shall be identified and added to the well history. Geologic features include, but are not limited to, seismic faults.
- (2) For the purposes of this section, the "fracture zone" is defined as the volume surrounding the well bore where fractures were created or enhanced by the hydraulic fracturing treatment. The safety factor shall be at least five and may vary depending upon geologic knowledge.
- (j) (1) The supplier may claim trade secret protection for the chemical composition of additives pursuant to Section 1060 of the Evidence Code, or the Uniform Trade Secrets Act (Title 5 (commencing with Section 3426) of Part 1 of Division 4 of the Civil Code).
- (2) If a supplier believes that information regarding a chemical constituent of a hydraulic fracturing fluid is a trade secret, the supplier shall nevertheless disclose the information to the division in conjunction with a hydraulic fracturing treatment permit application, if not previously disclosed, within 30 days following cessation of hydraulic fracturing on a well, and shall notify the division in writing of that belief.
- (3) The supplier is not required to disclose trade secret information to the operator.
- (4) This subdivision does not permit a supplier to refuse to disclose the information required pursuant to this section to the division.
- (5) To comply with the public disclosure requirements of this section, the supplier shall indicate where trade secret information has been withheld and the specific name of a chemical constituent shall be replaced with the chemical family name or similar descriptor associated with the trade secret chemical information.
- (6) Except as provided in subparagraph (B) of paragraph (8), the division shall protect from disclosure any trade secret designated as such by the supplier, if that trade secret is not a public record.
- (7) The supplier shall notify the division in writing within 30 days of any changes to information provided to the division to support a trade secret claim.

(8) Upon receipt of a request for the release of information to the public, which includes information the supplier has notified the division is a trade secret and is not a public record, the following procedure applies:

(A) The division shall notify the supplier of the request in writing by certified mail, return receipt requested.

(B) The division shall release the information to the public, but not earlier than 60 days after the date of mailing the notice of the request for information, unless, prior to the expiration of the 60-day period, the supplier obtains an action in an appropriate court for a declaratory judgment that the information is subject to protection or for a preliminary injunction prohibiting disclosure of the information to the public and provides notice to the division of that action.

(9) (A) Except as provided in subparagraph (B) of paragraph (8), trade secret information is not a public record and shall not be disclosed to anyone except to an officer or employee of the division, the state, local air districts, or the United States, in connection with the official duties of that officer or employee, to a health professional, under any law for the protection of health, or to contractors with the division or the state and its employees if, in the opinion of the division, disclosure is necessary and required for the satisfactory performance of a contract, for performance of work, or to protect health and safety.

(B) A health professional may share trade secret information with other persons as may be professionally necessary, including, but not limited to, the patient and other health professionals. Confidentiality of the trade secret information shall be maintained. The holder of the trade secret may request a confidentiality agreement consistent with the requirements of this subdivision to whom this information is disclosed as soon as circumstances permit. If necessary, a procedure for timely disclosure by the division in the event of an emergency shall be identified.

(k) This section does not apply to routine pressure tests to monitor the integrity of wells and well casings.

(l) A well granted confidential status pursuant to Section 3234 shall comply with this section, with the exception of the disclosure of hydraulic fracturing fluids pursuant to subdivision (g) which shall not be required until the confidential status of the well ceases.

(m) The division shall perform random periodic spot check investigations to ensure that the information provided on hydraulic fracturing treatments is accurately reported, including that the estimates provided prior to the commencement of the hydraulic fracturing treatment are reasonably consistent with the well history.

(n) Where the division shares jurisdiction over a well or the hydraulic fracturing treatment on a well with a federal entity, the division's rules and regulations shall govern the hydraulic fracturing treatment of the well.

**SEC. 3.** Section 3213 of the Public Resources Code is amended to read:

**3213.** The history shall show the location and amount of sidetracked casings, tools, or other material, the depth and quantity of cement in cement plugs, the shots of dynamite or other explosives, and the results of production and other tests during drilling operations. All data on hydraulic fracturing treatments pursuant to Section 3160 shall be recorded in the history.

**SEC. 4.** Section 3215 of the Public Resources Code is amended to read:

**3215.** (a) Within 60 days after the date of cessation of drilling, rework, hydraulic fracturing treatment, or abandonment operations, or the date of suspension of operations, the operator shall file with the district deputy, in a form approved by the supervisor, true copies of the log, core record, and history of work performed, and, if made, true and reproducible copies of all electrical, physical, or chemical logs, tests, or surveys. Upon a showing of hardship, the supervisor may extend the time within which to comply with this section for a period not to exceed 60 additional days.

(b) The supervisor shall include information provided pursuant to subdivision (g) of Section 3160 on existing publicly accessible maps on the division's Internet Web site, and make the information available such that hydraulic fracturing treatment and related information are associated with each specific well. If data is reported on an Internet Web site not maintained by the division pursuant to paragraph (2) of subdivision (g) of Section 3160, the division shall provide electronic links to that Internet Web site. The public shall be able to search and sort the hydraulic fracturing treatment and related information by at least the following criteria:

(1) Geographic area.

(2) Additive.

- (3) Chemical constituent.
- (4) Chemical Abstract Service number.
- (5) Time period.
- (6) Operator.

(c) Notwithstanding Section 10231.5 of the Government Code, on or before January 1, 2016, and annually thereafter, the supervisor shall, in compliance with Section 9795 of the Government Code, prepare and transmit to the Legislature a comprehensive report on hydraulic fracturing in the exploration and production of oil and gas resources in California. The report shall include aggregated data of all of the information required to be reported pursuant to Section 3160 reported by the district, county, and operator. The report also shall include relevant additional information, as necessary, including, but not limited to, all the following:

- (1) Aggregated data detailing the disposition of any produced water from wells that have undergone hydraulic fracturing treatments.
- (2) Aggregated data describing the formations where wells have received hydraulic fracturing treatments including the range of safety factors used and fracture zone lengths.
- (3) The number of emergency responses to a spill or release associated with a hydraulic fracturing treatment.
- (4) Aggregated data detailing the number of times trade secret information was not provided to the public, by county and by each company, in the preceding year.
- (5) Data detailing the loss of well and well casing integrity in the preceding year for wells that have undergone hydraulic fracturing treatment. For comparative purposes, data detailing the loss of well and well casing integrity in the preceding year for all wells shall also be provided. The cause of each well and well casing failure, if known, shall also be provided.
- (6) The number of spot check inspections conducted pursuant to subdivision (m) of Section 3160, including the number of inspections where the composition of hydraulic fracturing fluids were verified and the results of those inspections.
- (7) The number of hydraulic fracturing treatments witnessed by the division.
- (8) The number of enforcement actions associated with hydraulic fracturing treatments, including, but not limited to, notices of deficiency, notices of violation, civil or criminal enforcement actions, and any penalties assessed.

(d) The report shall be made publicly available and an electronic version shall be available on the division's Internet Web site.

**SEC. 5.** Section 3236.5 of the Public Resources Code is amended to read:

**3236.5.** (a) A person who violates this chapter or a regulation implementing this chapter is subject to a civil penalty not to exceed twenty-five thousand dollars (\$25,000) for each violation. A person who commits a violation of Article 3 (commencing with Section 3150) is subject to a civil penalty of not less than ten thousand dollars (\$10,000) and not to exceed twenty-five thousand dollars (\$25,000) per day per violation. An act of God and an act of vandalism beyond the reasonable control of the operator shall not be considered a violation. The civil penalty shall be imposed by an order of the supervisor pursuant to Section 3225 upon a determination that a violation has been committed by the person charged. The imposition of a civil penalty under this section shall be in addition to any other penalty provided by law for the violation. When establishing the amount of the civil penalty pursuant to this section, the supervisor shall consider, in addition to other relevant circumstances, all of the following:

- (1) The extent of harm caused by the violation.
- (2) The persistence of the violation.
- (3) The pervasiveness of the violation.
- (4) The number of prior violations by the same violator.

(b) An order of the supervisor imposing a civil penalty shall be reviewable pursuant to Article 6 (commencing with Section 3350). When the order of the supervisor has become final and the penalty has not been paid, the supervisor may apply to the appropriate superior court for an order directing payment of the civil penalty. The supervisor may also seek from the court an order directing that production from the well or use of the production facility that is the subject of the civil penalty order be discontinued until the violation has been remedied to the satisfaction of the supervisor and the civil penalty has been paid.

(c) Any amount collected under this section shall be deposited in the Oil, Gas, and Geothermal Administrative Fund.

**SEC. 6.** Section 3401 of the Public Resources Code is amended to read:

**3401.** (a) The proceeds of charges levied, assessed, and collected pursuant to this article upon the properties of every person operating or owning an interest in the production of a well shall be used exclusively for the support and maintenance of the department charged with the supervision of oil and gas operations.

(b) Notwithstanding subdivision (a), the proceeds of charges levied, assessed, and collected pursuant to this article upon the properties of every person operating or owning an interest in the production of a well undergoing a hydraulic fracturing treatment, may be used by public entities, subject to appropriation by the Legislature, for all costs associated with hydraulic fracturing treatments including scientific studies required to evaluate the treatment, inspections, and any air and water quality sampling, monitoring, and testing performed by public entities.

**SEC. 7.** No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

**FACT SHEET: SB 4**

**AUTHOR: SENATOR FRAN PAVLEY**  
**(CO-AUTHORS: SENATORS DE LEÓN, LENO AND MONNING &**  
**ASSEMBLYMEMBER STONE)**

**COMPREHENSIVE REGULATION OF FRACKING**

UPDATED: MAY 6, 2013

**THE PROBLEM**

Hydraulic fracturing or “fracking” of underground oil- and gas-bearing formations is a well stimulation treatment to create or enhance cracks in the formation in order to improve oil and gas production. Recent advances in the practice of fracking have made the development of previously-uneconomic oil and gas reservoirs financially feasible and have contributed to drilling and production booms in many areas. The extensive use of fracking is of increasing public concern due to the potential risks to human and environmental health, public safety, water supply and quality, and other factors. The development of California’s hydrocarbon reserves may depend upon fracking, yet it is largely outside the current regulatory framework.

**BACKGROUND**

In California, the Department of Conservation’s Division of Oil, Gas and Geothermal Resources (DOGGR) is the oil and gas industry regulator. Fracking of some form has apparently been in wide-spread use in California for decades – primarily to stimulate oil production. DOGGR has repeatedly stated that it has little-to-no information available on the practice, despite its extensive use here. DOGGR has also acknowledged that its existing authority is sufficient to regulate fracking. It has not done so to-date, despite three years of legislative approval of budgets that included additional funding and personnel available for work on fracking. Finally, in response to legislative pressure, in March 2012 DOGGR asked for voluntary disclosure of fracking operations in California and began a series of public workshops across the state to gather input on fracking

regulations. In December 2012, DOGGR released a “discussion draft” of proposed fracking regulations, and is again holding public workshops to receive public input.

While the “discussion draft” contains some positive elements (e.g. advance public notification, enhanced well and well-casing integrity testing before and after fracking, among others), overall the proposal is inadequate and fails to address the public’s concern about transparency or provide for regulatory accountability. In February 2013, Senator Pavley co-chaired a legislative informational hearing on fracking which revealed poor coordination between regulators, significant gaps in regulation, and a complete lack of available data related to fracking, including waste disposal.

Studies and reports from other states and by the federal government indicate there are numerous instances where fracking and fracking-related activities pose or have the potential to pose hazards to public, occupational and environmental health and safety. New York is maintaining its fracking moratorium until a public health study is completed and academic efforts are underway to address public health impacts related to fracking in eastern states. Oil and gas wells cost millions of dollars to drill, and can produce millions of dollars of oil and gas. According to estimates by the federal government, the regulatory compliance costs for fracking are comparatively nominal, particularly in comparison to groundwater clean-up costs.

**THE SOLUTION**

SB 4 (Pavley) provides a comprehensive statutory framework for fracking regulation in California. SB 4 has been endorsed by the San Jose Mercury News and the Bakersfield Californian. The San Francisco Chronicle, the

Ventura County Star, and the San Gabriel Valley Tribune have also editorialized positively about the issues addressed in the bill. SB 4 also incorporates the majority of the recommendations for effective regulation of fracking in California in a recent UC Berkeley Law study.

In its current form, the bill would:

- Require an independent scientific study on fracking addressing occupational, public and environmental health and safety be conducted by January 1, 2015. The study will address induced seismicity associated with fracking. (*Public Resources Code (PRC) §3160a*)
- Require DOGGR to adopt fracking regulations by January 1, 2015 that include full disclosure of the composition and disposition of hydraulic fracturing fluids with trade secret protection for chemical formulas extended to industry. (*PRC §3160b*)
- The name and quantity of each chemical species will be publicly-available. For valid trade secret claims, the chemical family name will be substituted for the specific name. (*PRC §3160j*)
- Require that DOGGR enter into formal agreements with specified regulators to ensure regulatory accountability and public transparency for fracking operations including disposal by January 1, 2015. (*PRC §3160c*)
- Integrate public reporting and disclosure of fracking into existing regulatory processes. (*PRC §3160c, §3213, §3215*)
- Require that well operators obtain a permit for fracking. The permit application would include estimates of the amount of water and the composition of the fracking fluids planned to be used. (*PRC §3160d*)
- Require the well operator to provide at least 30 days advance notice to the public, DOGGR and the regional water quality control board of the intent to frack a well. The well owner would also have to

specifically notify DOGGR 72 hours ahead of the scheduled job in order for DOGGR to witness the procedure, if needed. (*PRC §3160d*)

- Allow the neighbors to have baseline and follow-up water quality testing on water wells and surface water by the regional water board. (*PRC §3160d*)
- Require that no fracking permits will be issued after January 1, 2015 until the independent scientific study is completed. (*PRC §3160e*)
- Require that DOGGR develop and maintain its own web-site for fracking information by January 1, 2016, although Fracfocus.org could be used in the interim. (*PRC §3160g*)
- Provide a procedure for trade secret protections to be challenged and for health professionals and other regulators to obtain trade secret information, if needed. (*PRC §3160b, j*)
- Keep intact existing exploratory well confidentiality protections. (*PRC §3160l*)
- Require DOGGR to perform spot checks to ensure fracking data provided are accurate. (*PRC §3160m*)
- Require DOGGR to annually report to the Legislature on fracking. Specific data reporting requirements will facilitate public dissemination and ease public concerns. (*PRC §3215*)
- Increase the civil fine provision to at least \$10,000 and up to \$25,000 per day per violation. (*PRC §3236.5*)
- Amend the existing oil and gas production fee that supports DOGGR to specifically include fracking-related activities. (*PRC §3401*)
- Incorporate additional clarifying and technical provisions to promote regulatory accountability and public transparency.

## **LEGISLATIVE HISTORY**

- Passed Senate Natural Resources and Water Committee (6 – 2)
- Passed Senate Environmental Quality Committee (6 – 2)

## **SUPPORT**

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California Coastal Protection Network  
Councilmember Brian Brennan, City of  
Ventura  
Councilmember Carmen Ramirez, City of  
Oxnard  
Environmental Working Group  
Natural Resources Defense Council  
Environmental Defense Center  
Mayor Lou LaMonte, City of Malibu  
Ventura County Board of Supervisors  
Santa Cruz County Board of Supervisors  
San Fernando Valley Young Democrats  
The League of Women Voters  
Los Angeles County Board of Supervisors  
Los Angeles Community College District  
California Association of Professional  
Scientists  
Paw PAC  
South Coast Air Quality Management District  
(w/amendments)  
Sierra Club California (if amended)  
Clean Water Action (if amended)  
Earthworks (if amended)

## **OPPOSITION**

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California Chamber of Commerce  
California Independent Petroleum Association  
American Chemistry Council  
California Manufacturers and Technology  
Association  
California Business Properties Association  
Citizens Coalition for a Safe Community  
Western States Petroleum Association  
Physicians for Social Responsibility – Los  
Angeles (unless amended)



BOARD OF SUPERVISORS  
COUNTY OF VENTURA  
GOVERNMENT CENTER, HALL OF ADMINISTRATION  
800 SOUTH VICTORIA AVENUE, VENTURA, CALIFORNIA 93009

## ATTACHMENT 3

MEMBERS OF THE BOARD  
JOHN C. ZARAGOZA, Chair  
STEVEBENNETT  
LINDA PARKS  
KATHY I. LONG  
PETER C. FOY

STEVE BENNETT  
SUPERVISOR, FIRST DISTRICT  
(805) 654-2703  
FAX: (805) 654-2226  
E-mail: steve.bennett@ventura.org

December 11, 2012

Board of Supervisors  
800 S. Victoria Avenue  
Ventura, CA 93009

**SUBJECT: Hydraulic Fracturing of Oil and Gas Wells - Request for Report Back from CEO and County Counsel and Letter from Chair to State Legislative Delegation.**

**RECOMMENDATION:**

- 1) Direct the CEO and County Counsel to report back by March 13, 2013 regarding hydraulic fracturing of oil and gas wells, as further described herein.
- 2) Support sending the attached letter to our state legislative delegation requesting urgent legislation regarding hydraulic fracturing.

**DISCUSSION:**

One of Ventura County's most precious resources is our supply of fresh water in our local aquifers.

Recent media and industry reports have identified the potential for a substantial increase in the oil and gas industry's use of hydraulic fracturing, or "fracking" of both new and old wells, particularly in California's huge Monterey Shale formation. This formation is present in Ventura County, as are other petroleum deposits that may be subject to fracking. The industry website "frackfocus.org" identifies several wells in Ventura County that have recently been fracked. However, no public agency knows the extent of fracking in Ventura County.

Nationwide, numerous environmental and health concerns have been raised regarding fracking. These include:

1. Lack of disclosure of fracking locations, fracking chemicals, potable water usage, and wastewater disposal methods.
2. Possible consumption of large amounts of potable water. A recent *Wall Street Journal* article states that fracking uses between two and four million gallons of water per well, with up to 25% of that amount leaving the well as wastewater.
3. Potential generation of large volumes of contaminated waste water, and the possibility that disposal of this waste water could pollute land and water supplies, or induce earthquakes

(in response to a USGS report linking fracking wastewater injection wells and earthquakes, the State of Ohio enacted regulations of this practice).

4. Possible risks to drinking water and agricultural aquifers from fracking operations and the chemicals used in fracking.
5. An increase in well drilling that may not be adequately regulated to protect public health and safety or nearby residents or agriculture.

In a public workshop held in our Board room earlier this by the State Division of Oil, Gas, and Geothermal Resources (DOGGR), DOGGR staff said that the state has no regulations specific to fracking, and that DOGGR intends to promulgate fracking regulations to address concerns that DOGGR has identified. To date, DOGGR has not released any proposed regulations, but has encouraged voluntary reporting of fracking operations. Several fracking-related bills were introduced in the State legislature in 2012, but none were enacted.

Ventura County is highly dependent on local groundwater for potable and agricultural uses. In some areas, petroleum deposits underlie or adjoin aquifers, aquifer recharge areas, and surface waters. Additionally, water is a precious commodity that is generally oversubscribed in most areas of the county.

Protection of Ventura County's water resources is a very high priority for County government and local water agencies. As both the water supply for homes and businesses and the necessary ingredient for our \$1-billion+ agriculture industry, groundwater resources must be stringently protected. Once an aquifer is contaminated, it may not always be feasible to remove the contamination. Use of scarce local water is a concern, and overdraft of aquifers also poses the problems of land subsidence, seawater intrusion, and degradation of water quality.

At present, we simply do not know enough about fracking to tell our constituents whether there is a significant risk from this process or not. We do not know where fracking is occurring, where the fresh water comes from, or where the toxic wastewater goes.

Historically, environmental protection measures are put into place after the harm is discovered. With our drinking and agricultural water supplies potential exposed to risk, we cannot afford to wait until damage to these critical resources is detected. Accordingly, we request that the CEO report back to the Board on the fracking issue, to include among other issues:

- Available information on the amount and source of fresh water used or expected to be used in local fracking operations
- Available information on the method and location of disposal of local fracking waste water
- The extent of the County's authority over fracking and waste water disposal, and the ability to regulate new wells
- The areas of the county where know petroleum deposits lie under usable aquifers
- The areas of the county with Monterey Shale formations
- The status of state regulations
- Means of obtaining disclosure of fracking locations and fracking chemicals
- The prospects for additional fracking in Ventura County

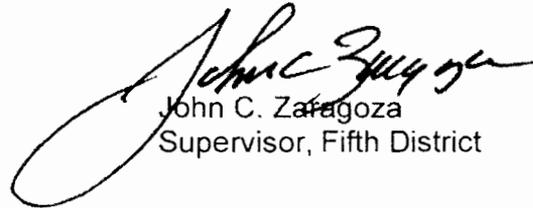
In conclusion, Ventura County's great reliance on local water supplies makes it imperative that we stay abreast of any potential risks to those supplies. Ventura County has historically balanced oil and gas production and the jobs it brings with the protection of our natural and agricultural resources. It is important that this balancing continue to occur, and to do so, we must have adequate information on which we and the public can make decisions. The recommended report back will enable us to be properly informed about fracking in Ventura County and any risks it may pose.

The attached letter that is recommended for transmittal to our State legislative delegation encourages the adoption of urgency legislation to require the disclosure of fracking locations and chemicals, identification of the source of and amount of fresh water used, and the adoption of regulations to assure protection of water supplies, people, and resources from fracking operations and wastewater disposal.

Cordially,



Steve Bennett  
Supervisor, First District



John C. Zaragoza  
Supervisor, Fifth District

Attachment

MEMBERS OF THE BOARD

JOHN C. ZARAGOZA, Chair  
STEVE BENNETT  
LINDA PARKS  
KATHY I. LONG  
PETER C. FOY

December 11, 2012

*DRAFT*

(individually addressed to State legislators)

RE: Request for Urgency Legislation Regarding Hydraulic Fracturing of Oil & Gas Wells

Honorable :

Ventura County is highly dependent on local groundwater resources for potable water, and groundwater is the lifeblood of our \$1-billion-plus agricultural industry. Protection of local groundwater aquifers is essential for continuation of economic activity and domestic water supply in this county. Ventura County is a statewide leader in managing and protecting groundwater through groundwater management agencies and the active efforts of multiple water districts and city and county agencies. Many millions of dollars have been invested in this collective effort.

Ventura County cannot afford to take chances with risks to our groundwater supplies. We are therefore concerned that the practice of hydraulic fracturing, or "fracking," of oil and gas wells is currently unregulated, and possibly undisclosed. Additionally, large amounts of potable water are potentially consumed, and the potential generation of large volumes of toxic wastewater raises questions about disposal methods and impacts.

We encourage the enactment of urgency legislation to require the advance public disclosure of fracking locations and fracking chemicals, the adoption of State regulations to assure the protection of groundwater when fracking occurs, require reporting of the source and amount of water used, and requirements to assure that wastewater disposal does not pose a significant risk to water supplies, people, or natural resources.

Cordially,

John C. Zaragoza  
Chair, Board of Supervisors

COUNTY EXECUTIVE OFFICE  
MICHAEL POWERS  
County Executive Officer

**J. Matthew Carroll**  
Assistant County Executive Officer

**Paul Derse**  
Assistant County Executive Officer/  
Chief Financial Officer

**Catherine Rodriguez**  
Assistant County Executive Officer/  
Labor Relations & Strategic Development

**Kelly Shirk**  
Director Human Resources

April 9, 2013

Board of Supervisors  
County of Ventura  
800 South Victoria Avenue  
Ventura, CA 93009

**SUBJECT:**            **Receive and File a Presentation by County Staff and the Division of Oil, Gas, and Geothermal Resources Regarding Hydraulic Fracturing of Oil and Gas Wells in Ventura County; and Direct CEO Staff to Monitor Both the Legislative and Regulatory Process as it Relates to Hydraulic Fracturing**

**RECOMMENDATIONS:**

1. Receive and file a presentation by County staff and the State Division of Oil, Gas, and Geothermal Resources regarding hydraulic fracturing of oil and gas wells in Ventura County.
2. Direct CEO staff to monitor both the legislative and regulatory process as it relates to hydraulic fracturing.

**FISCAL/MANDATES IMPACT:**

Mandatory:	No
Source of Funding:	N/A
Funding Match:	None
Impact on other Departments:	None

**DISCUSSION:**

At the December 11, 2012 meeting, your Board directed the County Executive Officer and County Counsel to report back regarding the hydraulic fracturing of oil and gas wells. Your Board identified a number of environmental and public health concerns related to hydraulic

fracturing and directed that they be addressed in this report. The issues were primarily of a technical and a legal nature. County staff contacted the State Division of Oil, Gas, and Geothermal Resources (DOGGR) regarding the technical issues, and we were very fortunate to have them agree to participate in this presentation. Mr. Tim Kustic, State Oil & Gas Supervisor for DOGGR, will be making a formal presentation to your Board and be available to answer questions. In addition to DOGGR, County staff will be available to address technical issues as well as provide a legislative update. County Counsel will be available to address legal issues such as preemption.

While the presentation will offer more detailed information in response to the Board's December 11, 2012 direction, the following provides a summary of the issues raised by your Board:

1. What means are available to obtain disclosure of hydraulic fracturing locations and chemicals?

Currently, within California there is no regulatory requirement that hydraulic fracturing locations and/or chemicals be disclosed. However, there is a website in place, *FracFocus* ([fracfocus.org](http://fracfocus.org)), where such information can be found. *FracFocus* is a national hydraulic fracturing chemical registry managed by the Groundwater Protection Council and the Interstate Oil and Gas Compact Association. Oil and gas companies in California are encouraged to voluntarily post information related to their operations on the website. In California, oil and gas companies with 80 percent of the wells in the state are participating and registering their hydraulic fracturing activities; 811 wells have been identified in California, while approximately 41,000 have been reported throughout the U.S. In Ventura County, the website contains information related to the location and chemicals used at 13 oil wells where a total of 16 hydraulic fracturing operations have taken place. Exhibit 1 is a map showing the location of those wells. Exhibit 2 provides a sample of the information provided for each of the 15 hydraulic fracturing operations registered in Ventura County.

There are several bills pending before the California legislature (discussed in Exhibit 5 attached), some of which contain proposals for disclosure of hydraulic fracturing locations and chemicals.

2. What amount of water is currently used or expected to be used in local hydraulic fracturing operations, and what is its source?

According to the information provided through *FracFocus* for the 13 wells in Ventura County where hydraulic fracturing is taking place, the average amount of water used in the hydraulic fracturing process is less than 300,000 gallons per well. While this is a measurable and significant amount of water, it is well below the approximately 5.5 million gallon estimate reported for hydraulic fracturing used in wells in Pennsylvania and other eastern and mid-western states.

According to the information provided by Western States Petroleum Association (WSPA) and reviewed by DOGGR, historically, the water used in Ventura County oilfield operations with hydraulic fracturing has come from the following sources: 1) water produced in the oil field; 2) brackish non-potable water from a source well in the oil field; 3) water sourced from freshwater wells controlled by the production field; 4) if technically feasible, reuse of produced water from hydraulic fracturing fluids and/or; 5) water purchased from the local water district.

3. How and where is local hydraulic fracturing waste water disposed of?

According to the information provided by WSPA and reviewed by DOGGR, in the Ventura county oilfield operations, the produced water (including any fracturing fluids) is separated from the oil, cleaned and filtered, and is re-injected into the same reservoir it came from as part of the enhanced oil recovery process. In other cases, waste water is injected into water disposal wells or waterflood injection wells permitted by the California Department of Conservation, DOGGR.

4. To what extent does the County have authority over hydraulic fracturing, the disposal of waste water, and the use of the practice on new wells?

According to County Counsel, under its police power and related zoning power, the County generally may regulate land uses and waste water disposal within its jurisdiction. The police power is derived from Article XI, Section 7, of the California Constitution, which provides:

“A county or city may make and enforce within its limits all local police, sanitary, and other ordinances not in conflict with general law.”

The County's power to control its land use and zoning decisions comes from this inherent police power, and the State zoning laws provide only a minimum of limitations in order that Counties may exercise the maximum degree of control over zoning matters (Government Code Section 65800).

However, these powers do have limits. The limitations include territorial limits, Federal and State preemption, and other Federal and State constitutional principles, and the California Coastal Act in the Coastal Zone. One area of significant State law preemption is the regulation of the subsurface/downhole component of all phases of oil and gas production including the subsurface aspects of waste water disposal, which is regulated by DOGGR and other State agencies, leaving the County to regulate only the surface components of these activities. Thus, due to Federal and State preemption, the County does not have the power to directly regulate subsurface aspects of hydraulic fracturing, waste water disposal, and the fracturing of new wells.

5. Where is the Monterey Shale formation located in Ventura County, and is it located under usable aquifers?

The Monterey Shale Formation is located beneath substantial portions of Ventura County; Exhibit 3 illustrates the locations of the Monterey Formation outcrops (where the formation is at the surface) in Ventura County. There are a number of drinking water aquifers located within the county, and as shown in Exhibit 3, the Monterey Shale Formation outcrops are above them in some small areas. Most of the Monterey Formation within the county is not expressed in outcroppings but rather is deeply underground, much of it as deep as 20,000 feet below the surface; these areas are not mapped or shown in Exhibit 3.

6. What are the prospects for additional hydraulic fracturing in Ventura County?

According to the information provided by WSPA and reviewed by DOGGR, operators have been using hydraulic fracturing on a limited basis in Ventura County oilfield operations over the past several years. Also per WSPA and reviewed by DOGGR, it is anticipated that not more than 15 wells will be hydraulically fractured during 2013.

7. What is the status of current State regulatory efforts?

Per the DOGGR website:

"The Department of Conservation/Division of Oil, Gas, and Geothermal Resources on December 18, 2012 released a 'discussion draft' of regulations for the oil and natural gas production technique known as hydraulic fracturing. Discussion draft means that this version does not kick off the formal rulemaking process. Instead, it is a starting point for discussion by key stakeholders – industry, the environmental community, and other regulators, as well as interested members of the public – in preparation for the more formal process. These 'discussion draft' regulations include provisions for pre-fracturing well testing; advance notification; monitoring during and after fracturing operations; disclosure of materials used in fracturing fluid; trade secrets; and storage and handling of hydraulic fracturing fluids."

The "Discussion Draft" is attached as Exhibit 4.

Currently, there are nine bills before the California State legislature that deal with hydraulic fracturing. Please see Exhibit 5 for a complete list, a brief summary, and the status of each bill.

Both the regulatory and legislative process will be monitored by the CEO's office.

8. What information is available regarding the link between hydraulic fracturing and seismic activity/earthquakes?

The research into this question is in its infancy in large part due to the fact that there have been no reports of induced seismicity from hydraulic fracturing in California. Nonetheless, the Induced Seismicity Consortium at the University of Southern California has and continues to research the matter. The Consortium has preliminarily concluded: 1) the energy level released from a drilling event is large enough to be recorded but is too low to directly create a major seismic event; and 2) that the migration distance of the fluid in the hydraulic fracturing process is too small to generate a large damaging seismic event.

As noted above, the presentation by DOGGR staff will provide a detailed description of the hydraulic fracturing process and further address many of the issues described above.

It is recommended that your Board receive and file the presentation by County staff and the State Division of Oil, Gas, and Geothermal Resources regarding hydraulic fracturing of oil and gas wells in Ventura County and direct CEO staff to monitor both the legislative and regulatory process as it relates to hydraulic fracturing.

This item has been reviewed by the County Executive Office, County Counsel, Resource Management Agency, and Air Pollution Control District. Should you have any questions regarding this item, please contact Sue Hughes, CEO Deputy Executive Officer, at (805) 654-3836.



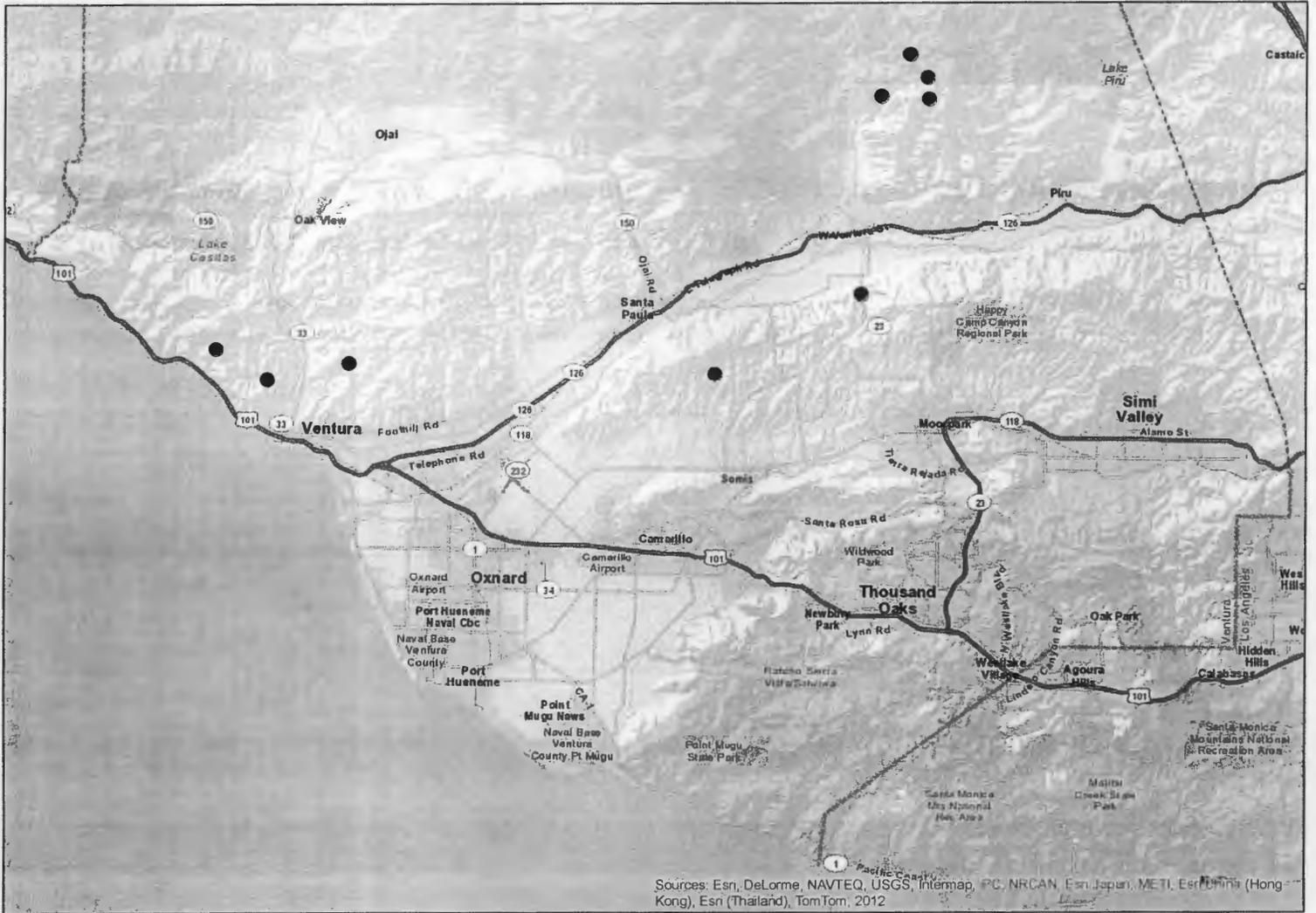
Sue Hughes  
Deputy Executive Officer



Michael Powers  
County Executive Officer

Attachments:

- Exhibit 1: Map showing locations of known hydraulically fractured wells in Ventura County
- Exhibit 2: Sample information from *FracFocus* website
- Exhibit 3: Map showing Monterey Shale Formation and Aquifers within Ventura County
- Exhibit 4: Pre-Rulemaking Discussion Draft
- Exhibit 5: Summary of State legislation regarding hydraulic fracturing



Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, PC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2012



Ventura County  
Resource Management Agency  
Information Systems Department  
Map created on 03/28/2013



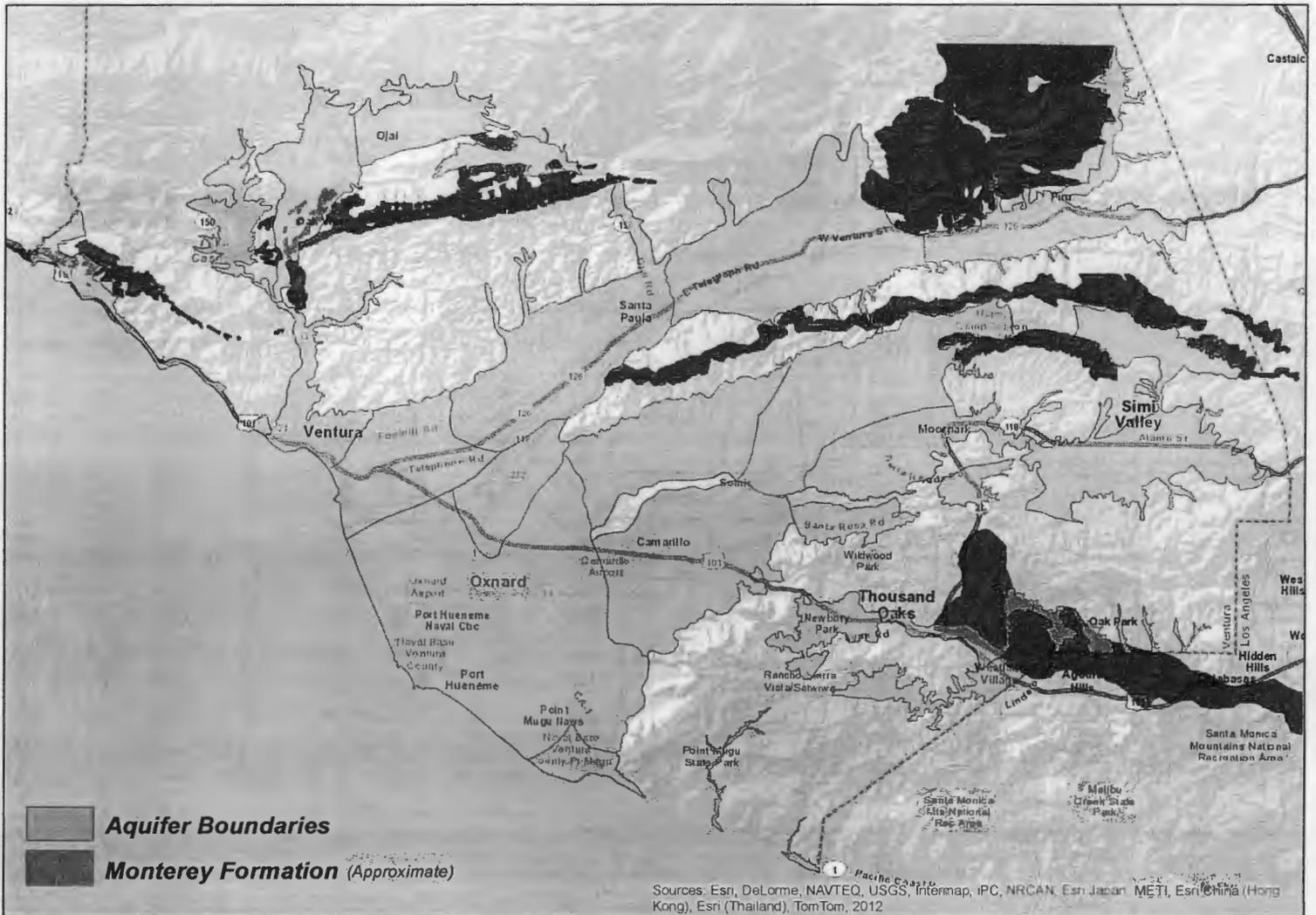
## Hydraulically Fractured Oil Wells in Ventura County Source: Frac Focus, 2013



Disclaimer: this map was created by the Ventura County Resource Management Agency, Mapping Services - GIS, which is designed and operated solely for the convenience of the County and related public agencies. The County does not warrant the accuracy of this map and no decision involving a risk of economic loss or physical injury should be made in reliance thereon.



Hydraulic Fracturing Fluid Product Component Information Disclosure							
Fracture Date:	6/27/2011						
State:	CA						
County:	Ventura						
API Number:	04-111-22084						
Operator Name:	Occidental (OXY)						
Well Name and Number:	Grubb #477						
Longitude:	-118.381208						
Latitude:	34.326099						
Long/Lat Projection:	NAD27						
Production Type:	Oil						
True Vertical Depth (TVD):	8,474						
Total Water Volume (gal):	361,620						
Hydraulic Fracturing Fluid Composition:							
Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)	Maximum Ingredient Concentration in HF Fluid (% by mass)	Comments
Water	Operator	Carrier	Water	7732-18-5	100.00%	75.89803%	
Super LC	BHI	Proppant	Silicon Dioxide (Silica Sand)	14808-80-7	97.00%	20.75130%	
			Phenol Formaldehyde Resin	9003-36-4	5.00%	1.09965%	
			Hexamethylenetetramine	1009-7-0	0.01%	0.00214%	
Ammonium Chloride	BHI	Clay Control	Ammonium Chloride	12125-02-0	100.00%	0.01259%	
BC-3	BHI	Breaker Catalyst	Non-hazardous	-	100.00%	0.00436%	
BF-7L	BHI	Buffer	Potassium Carbonate	584-08-7	50.00%	0.20739%	
CI-27	BHI	Corrosion Inhibitor	Methanol	67-56-1	60.00%	0.00454%	
			Thiourea Polymer	68527-46-1	30.00%	0.00227%	
			Tall Oil Acid	61790-12-3	30.00%	0.00227%	
			Ethoxylated Alcohol <sup>®</sup> C14-15	68951-67-7	30.00%	0.00227%	
			Propargyl Alcohol	107-19-7	10.00%	0.00076%	
Alkane <sup>®</sup> C-10 Alpha-	84743-02-8	5.00%	0.00038%				
Clay Master-5C	BHI	Clay Control	Oxalkylated Amine Quat	138878-94-4	60.00%	0.04720%	
Enzyme G-1	BHI	Breaker	Hemicellulase Enzyme Concentrate	9025-56-3	3.00%	0.00419%	
			Water	7732-18-5	97.00%	0.13549%	
Ferrolol 210	BHI	Iron Control	Erythorbic Acid	89-85-6	100.00%	0.00302%	



Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2012



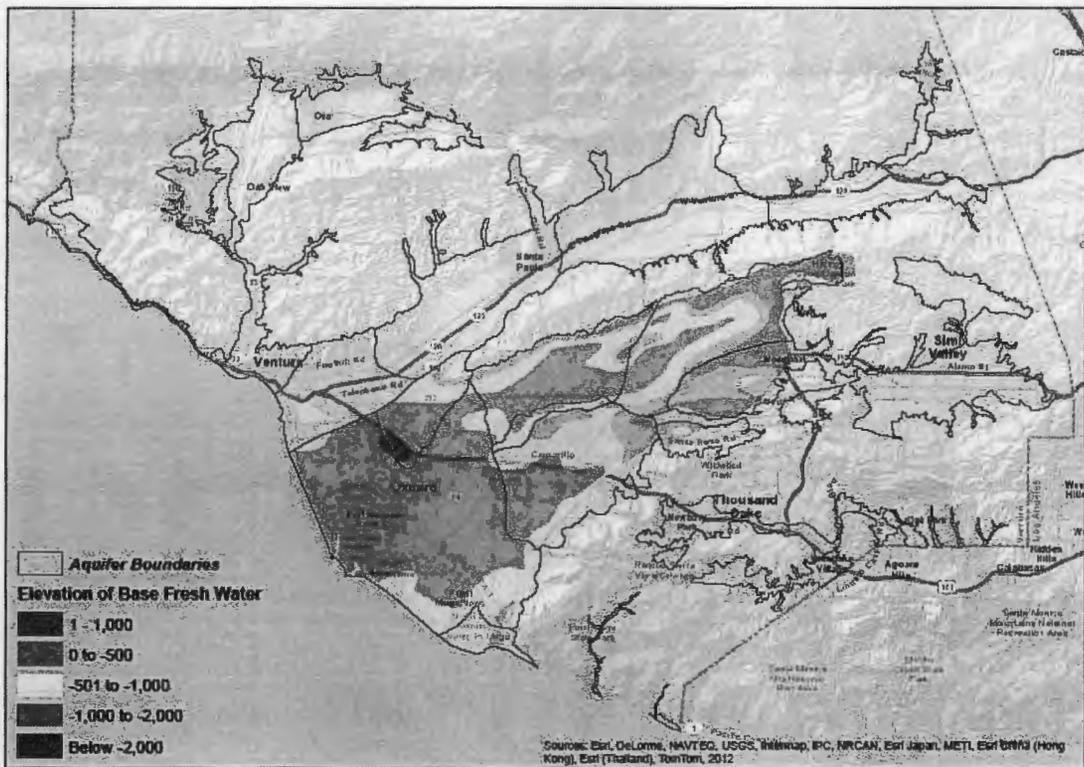
Ventura County  
Resource Management Agency  
Information Systems Department  
Map created on 04/03/2013



## Monterey Formation Outcrop Pattern and Aquifers in Ventura County

0 2 4 5 Miles

Disclaimer: This map was created by the Ventura County Resource Management Agency, Mapping Services - GIS, which is designed and operated solely for the convenience of the County and related public agencies. The County does not warrant the accuracy of this map and no decision involving a risk of economic loss or physical injury should be made in reliance thereon.



Ventura County  
Resource Management Agency  
Water Resources Department  
Map updated on 03/20/2012



### Aquifers and Elevation of Base Fresh Water in Ventura County

Disclaimer: This map was created by the Ventura County Resource Management Agency. No warranty is made by the County and its employees for the accuracy of the County and its employees. The County does not assume any liability for errors or omissions. The County does not assume any liability for errors or omissions. The County does not assume any liability for errors or omissions. The County does not assume any liability for errors or omissions.







## PRE-RULEMAKING DISCUSSION DRAFT

### CHAPTER 4. DEVELOPMENT, REGULATION, AND CONSERVATION OF OIL AND GAS RESOURCES

#### Subchapter 2. Environmental Protection

#### THE FOLLOWING ARTICLE IS ADDED:

#### Article 4. Hydraulic Fracturing

##### 1780. Definitions.

The following definition shall govern this article:

(a) "**Chemical Disclosure Registry**" means the chemical registry Internet Web site known as fracfocus.org developed by the Ground Water Protection Council and the Interstate Oil and Gas Compact Commission. If that Internet Web site becomes permanently inoperable, then "Chemical Disclosure Registry" shall mean another publicly accessible information Internet Web site that is designated by the Division.

(b) "**Health professional**" means a physician, physician assistant, nurse practitioner, registered nurse, or emergency medical technician licensed by the State of California.

(c) "**Hydraulic fracture**" means a technique used in stimulating a formation or zone that involves the pressurized injection of hydraulic fracturing fluid and proppant into an underground geologic formation in order to fracture the formation, thereby causing or enhancing, for the purposes of this division, the production of oil or gas from a well.

(d) "**Protected water**" means water that either:

(1) Contains no more than 3,000 mg/l total dissolved solids; or

(2) Contains no more than 10,000 mg/l total dissolved solids and is suitable for irrigation or domestic purpose.

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Section 3106, Public Resources Code.

##### 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.

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Section 3106, Public Resources Code.

##### 1782. General Hydraulic Fracturing Requirements.

(a) When hydraulic fracturing operations are conducted the operator shall ensure that all of the following occurs:

(1) Casing be sufficiently cemented or otherwise anchored in the hole in order to effectively control the well at all times;

(2) All protected water zones be isolated and sealed off to effectively prevent contamination or harm to any water therein;

## PRE-RULEMAKING DISCUSSION DRAFT

(3) All potentially productive zones, zones capable of over-pressurizing the surface casing annulus, or corrosive zones be isolated and sealed off to the extent that such isolation is necessary to prevent vertical migration of fluids or gases behind the casing;

(4) All hydraulic fracturing fluids are directed into the zone(s) of interest;

(5) The wellbore's mechanical integrity be tested and maintained;

(6) The hydraulic fracturing fluids and proppants used are of known quantity and description for reporting and disclosure as required pursuant to this Article;

(b) In addition to specific methods set forth in these regulations, to achieve the objectives of this section, the operator shall follow the intent of all applicable well construction requirements, use good engineering practices, and employ best industry standards.

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Section 3106, Public Resources Code.

### **1783. Required Data Prior to Hydraulic Fracturing.**

(a) The following data shall be submitted to the Division, and the appropriate regional water quality control board or boards with jurisdiction over the location of the well on a Form DOGGR HF1 at least 10 days prior to commencing hydraulic fracturing operations:

(1) Operator's name;

(2) Name of person filing the form;

(3) Telephone number of person filing notice;

(4) Name of person to contact with technical questions regarding operations;

(5) Telephone number and email address of person to contact with technical questions regarding operations;

(6) Name of the well;

(7) API number assigned to the well by the Division;

(8) Name of the oil field;

(9) County the well is located in;

(10) For directionally drilled wells, the proposed coordinates (from surface location) and the true vertical depth at total depth;

(11) Estimated true vertical depth;

(12) The name of the productive horizon to be hydraulically fractured;

(13) Anticipated volume and pressures of fluid to be injected;

(14) Anticipated distance of the fracture;

(15) The cement evaluation required under Section 1784(a)(3);

(16) The fracture radius analysis required under Section 1784(a)(4); and

(17) The hydraulic fracture treatment design required under Section 1784(a)(5).

(b) When hydraulic fracturing operations are performed in conjunction with the drilling, deepening, or re-drilling of a well, the completed Form DOGGR HF1 shall be submitted together with the notice of intent to commence drilling.

(c) The operator shall notify the Division at least 24 hours prior to commencing hydraulic fracturing operations. In no event shall hydraulic fracturing operations commence prior to the expiration of the 10 day period specified in subdivision (a) of this regulation.

## PRE-RULEMAKING DISCUSSION DRAFT

(d) Within 7 days of receipt of a Form DOGGR HF1, the Division will post on its public website information about the well subject to hydraulic fracturing operations.

(e) Records submitted to the Division pursuant to this section will be presumed to be public records for the purposes of the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code), unless the Public Resources Code section 3234 is applicable.

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Section 3106, Public Resources Code.

### **1784. Evaluation Prior to Hydraulic Fracture.**

(a) The operator shall do all of the following prior to commencing hydraulic fracturing operations:

(1) All cemented casing strings and all tubing strings to be utilized in the hydraulic fracturing operations shall be pressure tested for at least 30 minutes at a pressure not less than 500 psi greater than the maximum surface pressure anticipated during the hydraulic fracture operations. If during testing there is a pressure drop of 10% or more from the original test pressure, then the tested casing or tubing shall not be used until the cause of the pressure drop is identified and corrected. No casing or tubing shall be used unless it has been successfully tested pursuant to this section.

(2) All surface equipment to be utilized by operator for hydraulic fracturing treatment shall be rigged up as designed. The pump, and all equipment downstream from the pump, shall be pressure tested to at least 110% of the maximum allowable surface treating pressure.

(3) Allowing at least 48 hours to elapse after cement placement, the operator shall run a radial cement evaluation log or other cement evaluation method that is approved by the Division and capable of demonstrating adequate cementing. If the quality of the cement outside of the production casing is not sufficient to isolate strata containing protected water, then the operator must develop a remediation plan and obtain approval from the Division for the remediation plan prior to proceeding. The operator is only required to evaluate the cement that is required to be in place under Section 1722.4.

(4) The operator shall conduct a fracture radius analysis to verify that no fracturing fluids or hydrocarbons will migrate into a strata or zone that contains protected water.

(i) The operator shall utilize modelling approved by the Division that will effectively simulate the projected fracture height growth within the design limits of the projected hydraulic fracturing operations.

(ii) The fracture radius analysis shall include a review of all wells and faults (active or inactive) within a radius of twice the anticipated fracture length from each point of fracture to verify that no wells or faults will permit the migration of the fracturing fluids or hydrocarbons into a strata that contains protected water.

(iii) If a radius of twice the anticipated fracture length from a point of fracture extends beyond the productive horizon being evaluated for possible hydraulic fracture, then the fracture radius analysis shall include a review of the geological formations between the productive horizon and the base of the deepest stratum or zone that contains protected water. The operator shall assess the mechanical rock properties, including

## PRE-RULEMAKING DISCUSSION DRAFT

permeability, relative hardness (using Young's Modulus), relative elasticity (using Poisson's Ratio), and other relevant characteristics of the geological formations to determine whether the geological formations will ensure proper containment of the hydraulically induced fracture and act as an effective barrier to the vertical migration of fluids into one or more strata or zones that contain protected water.

(5) Utilizing the fracture radius analysis conducted pursuant to subsection (a)(4), the operator shall design the hydraulic fracturing treatment so as to ensure that the fracturing fluids or hydrocarbons do not migrate and come in contact with a strata or zone that contains protected water.

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Section 3106, Public Resources Code.

### **1785. Monitoring During Hydraulic Fracturing Operations.**

(a) The operator shall continuously monitor all of the following parameters during hydraulic fracturing operations:

- (1) Surface injection pressure;
- (2) Slurry rate;
- (3) Proppant concentration;
- (4) Fluid rate; and
- (5) All annuli pressures.

(b) The operator shall terminate hydraulic fracturing operations and immediately report it to the Division if any of the following occur:

- (1) A production-surface casing annulus pressure change of 20% or greater than the calculated pressure increase due to pressure and/or temperature expansion;
- (2) Pressure exceeding 80% of the API rated minimum internal yield on any casing string in communication with the hydraulic fracturing treatment;
- (3) A post hydraulic fracturing fluid volume returns to surface that is in excess of a volume that could reasonably be expected due to pressure or temperature expansion;
- (4) The operator has reason to suspect any potential breach in the production casing, production casing cement, or isolation of any sources of protected water.

(c) If any of the events listed in subdivision (b) occur, then the operator shall perform diagnostic testing on the well to determine whether a breach has occurred. Such testing shall be done as soon as is reasonably practical. If the testing reveals that a breach has occurred then the operator shall immediately shut-in the well, isolate the perforated interval, and notify the Division.

(d) If the surface casing annulus is not open to atmospheric pressure, then the surface casing pressures shall be monitored with a gauge and pressure relief device. The maximum set pressure on the relief device shall be the lowest of the following and hydraulic fracturing operations shall be terminated if pressures in excess of the maximum set pressure are observed in the surface casing annulus:

- (1) A pressure equal to: 0.70 times 0.433 times the true vertical depth of the surface casing shoe (expressed in feet);
- (2) 70% of the API rated minimum internal yield for the surface casing; or
- (3) A pressure change that is 20% or greater than the calculated pressure increase due to pressure and/or temperature expansion.

## PRE-RULEMAKING DISCUSSION DRAFT

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Section 3106, Public Resources Code.

### **1786. Storage and Handling of Hydraulic Fracturing Fluids.**

(a) Operators shall adhere to the following requirements for the storage and handling of fluids associated with hydraulic fracturing being stored at the wellsite, including hydraulic fracturing chemicals in concentrated and mixed form and hydraulic fracture fluid flowback, but not including freshwater:

(1) Non-freshwater fluids associated with hydraulic fracturing operations shall be stored in compliance with the secondary containment requirements of Section 1773.1.

(2) Operators shall be in compliance with all applicable testing, inspection, and maintenance requirements for production facilities containing hydraulic fracturing fluids.

(3) Non-freshwater fluids associated with hydraulic fracturing operations shall be accounted for in the operator's Spill Contingency Plan;

(4) Non-freshwater fluids associated with hydraulic fracturing operations shall not be stored in unlined sumps or pits;

(5) In the event of an unauthorized release, the operator shall perform clean up and remediation of the area in compliance with all applicable federal, state, and local laws and regulations.

(6) Within 5 days of the occurrence of an unauthorized release, the operator shall provide the Division a written report that includes:

(A) A description of the activities leading up to the release;

(B) The type and volumes of fluid released;

(C) The cause(s) of release;

(D) Action taken to stop, control, and respond to the release; and

(E) Steps taken by the operator to prevent future releases.

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Section 3106, Public Resources Code.

### **1787. Well Monitoring After Hydraulic Fracturing.**

(a) Operators shall monitor each producing well that has had hydraulic fracturing operations to identify any potential problems with a well that could endanger any underground source of protected water. If there is any indication of a well failure, the operator shall immediately notify the Division and perform diagnostic testing on the well to determine whether a well failure has actually occurred. If the testing indicates that a well failure has occurred, then the operator shall immediately take all appropriate measures to prevent contamination of all underground sources of protected water and all surface waters in the area of the well.

(b) Operators shall adhere to the following requirements for a well that has had hydraulic fracturing operations:

(1) The well shall be monitored on a daily basis for the first thirty days after hydraulic fracturing operations and on monthly basis thereafter for the following:

(A) The amount of gas, oil and water produced, including readily identifiable hydraulic fracture fluid flowback volume;

## PRE-RULEMAKING DISCUSSION DRAFT

- (B) The annular pressure of the well;
- (C) The tubing pressure of the well; and
- (D) The casing pressure of the well.

(2) Monitoring data shall be maintained for a period of at least 5 years after hydraulic fracturing operation and shall be made available to the Division upon request.

(3) The annular pressures of the well shall be reported to the Division annually. It shall be immediately reported to the Division if annular pressure exceeds 70 per cent of the API rated minimum internal yield or collapse strength of casing, or if surface casing pressures exceed a pressure equal to: 0.70 times 0.433 times the true vertical depth of the surface casing shoe (expressed in feet).

(4) The annular valve shall be kept accessible from the surface or left open and plumbed to the surface with working pressure gauge.

(5) A properly functioning pressure relief device shall be installed on the annulus between the surface casing and the production casing, or, if intermediate casing is set, on the annuli between the surface casing and the intermediate casing and the production casing. This requirement may be waived by the Division, if the operator demonstrates to the Division's satisfaction that the installation of a pressure relief device is unnecessary based on technical analysis and/or operating experience in the area.

(6) If a pressure relief device is installed, then all pressure releases from the device shall be reported to the Division within 24 hours of detection. The maximum set pressure of a surface casing pressure relief device shall be the lowest of the following:

- (A) A pressure equal to: 0.70 times 0.433 times the true vertical depth of the surface casing shoe (expressed in feet);
- (B) 70% of the API rated minimum internal yield for the surface casing; or
- (C) A pressure change that is 20% or greater than the calculated pressure increase due to pressure and/or temperature expansion

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Section 3106, Public Resources Code.

### **1788. Required Public Disclosures.**

(a) Except as provided in subdivision (c), within 60 days after the cessation of hydraulic fracturing operations, the operator shall post to the Chemical Disclosure Registry all the following information that is not claimed as a trade secret pursuant to Section 1788.1:

- (1) The well operator's name.
- (2) The hydraulic fracturing date.
- (3) The county in which the well is located.
- (4) The well API number.
- (5) The well name and number.
- (6) The location of the well, submitted as a non-projected, Latitude Longitude, in the General Coordinate System (GCS) NAD83.
- (7) The true vertical depth of the well.
- (8) The name of the productive horizon to be hydraulically fractured;
- (9) A complete list of the names, CAS numbers, and maximum concentration, in percent by mass, of each chemical added to the hydraulic fracturing fluid. Where the

## PRE-RULEMAKING DISCUSSION DRAFT

CAS number does not exist for a chemical, the operator may provide another unique identifier where available.

(10) The trade name, supplier, and a brief description of the intended purpose of each additive contained in the hydraulic fracturing fluid.

(11) The total volume of carrier fluid used during hydraulic fracturing.

(12) The disposition of the carrier fluid used to conduct hydraulic fracturing.

(13) Any radiological components or tracers injected into the well as part of the hydraulic fracturing process, a description of the recovery method, if any, for those components or tracers, the recovery rate and the disposal method for recovered components or tracers.

(14) The estimated volume of hydraulic fracture fluid flowback that has been recovered.

(b) If the Chemical Disclosure Registry is unable to accept and make publicly available any of the information specified in this section, then the operator shall submit the information to the Division.

(c) Operators are not required to post information to the Chemical Disclosure Registry if the information is found in a well record that the Division has determined is not public record, pursuant to Public Resources Code section 3234. If information listed in subsection (a) is not posted to the Chemical Disclosure Registry on this basis, then the operator shall inform the Division in writing, specifying the information that is not being publically disclosed. It is the operator's responsibility to post the information to the Chemical Disclosure Registry once the information becomes public record under Public Resources Code section 3234.

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Sections 3106, and 3234, Public Resources Code.

### **1788.1. Claims of Trade Secret Protection.**

(a) Operators are not required to post trade secrets to the Chemical Disclosure Registry. An operator who, on the basis of a claim of trade secret protection, withholds information that is otherwise required to be posted to the Chemical Disclosure Registry shall submit the following to the Division within 60 days after the cessation of hydraulic fracturing operations:

(1) Identification of the information withheld as protected trade secret in a manner that does not itself disclose information subject to a claim of trade secret protection. If the withheld information includes the identity of a chemical, the identification shall include the chemical family or similar descriptor for the chemical.

(2) The name, mailing address, phone number of the contact person for the person or entity who holds the withheld information and is asserting the claim of trade secret protection.

(3) A declaration under penalty of perjury by the holder of the withheld information that affirms or otherwise addresses, and provides specific information regarding, the following:

(A) The information identified in paragraph (1) was withheld as protected trade secret information, as defined in Civil Code section 3426.1, subdivision (d), or Penal Code section 499c;

## PRE-RULEMAKING DISCUSSION DRAFT

(B) The holder of the withheld information has not disclosed it to another person, other than a member of a local emergency planning committee, an officer or employee of the United States or a state or local government, an employee of those entities, or a person who is bound by a confidentiality agreement, and that person has taken reasonable measures to protect the confidentiality of the information and intends to continue to take measures, or disclosure has otherwise been limited so that the information is not readily available to competitors;

(C) The information is not required to be disclosed, or otherwise made available, to the public under any other federal or state law;

(D) Disclosure of the information would harm the competitive position of the disclosing person or entity; and

(E) The information is not readily discoverable through reverse engineering.

(b) The holder of the withheld information shall ensure that the Division is informed of any changes to the information required in subsection (a)(2).

(c) Information withheld on the basis of a claim of trade secret protection shall be replaced by posting text to the Chemical Disclosure Registry indicating information has been withheld as trade secret information and, if the withheld information includes the identity of a chemical, providing the chemical family or similar descriptor associated with the trade secret constituent.

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Section 3106, Public Resources Code; Section 1060, Evidence Code; Section 3426.1, Civil Code; Section 499c, Penal Code.

### **1788.2. Use of Trade Secret Information.**

(a) The holder of information withheld as trade secret pursuant to Section 1788.1 shall immediately provide the information to the Division, or to a public agency with lawful jurisdiction for either enforcement action or emergency response, upon receipt of written communication from the Division or other public agency stating that the information is necessary to investigate or respond to evidence of a spill or release of hydraulic fracturing fluid or material or evidence that hydraulic fracturing fluid or material has escaped the intended zone or zones of the hydraulic fracturing operations. The holder of information withheld as trade secret may request, and the Division or other public agency shall, as soon as circumstances permit, provide an agreement by the Division or other public agency to prevent the disclosure of trade secret information received pursuant to this section, to maintain the confidentiality of trade secret information, and to destroy all copies of the trade secret information received once the need for the information has ended.

(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;

## PRE-RULEMAKING DISCUSSION DRAFT

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

(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.

NOTE: Authority cited: Section 3013, Public Resources Code. Reference: Section 3106, Public Resources Code; Section 1060, Evidence Code; Section 3426.1, Civil Code; Section 499c, Penal Code.

Bills	Summary	Status
<p><b>AB 7</b> <b>(Wieckowski</b> <b>D)</b> Oil and gas: hydraulic fracturing.</p>	<p>AB 7 would define, among other things, hydraulic fracturing and hydraulic fracturing fluid.</p> <ul style="list-style-type: none"> <li>• The bill would require an operator of a well to record and include all data on hydraulic fracturing treatment, including the risk posed by potential seismicity, as a part of the history of the drilling of the well.</li> <li>• The bill would require DOGGR, in consultation with the Department of Toxic Substances Control, the State Air Resources Board, and the State Water Resources Control Board, on or before January 1, 2014, to adopt rules and regulations specific to hydraulic fracturing, including governing the construction of wells and well casings and full disclosure of the composition and disposition of hydraulic fracturing.</li> <li>• The bill would require an operator to file at least 30 days prior to the commencement of a hydraulic fracturing treatment, a notice of intention to commence hydraulic fracturing treatment containing specified information.</li> <li>• The bill would require the hydraulic fracturing to be completed within one year of the filing of the notice of intention.</li> <li>• The bill would require DOGGR, within 10 days of the receipt of the notice of intention, to make the notice publicly available, to post it on the division's Internet Web site, and to notify the appropriate regional water quality control board.</li> <li>• The bill would require the supplier, as defined, of the hydraulic fracturing treatment to provide to the operator, within 30 days following the conclusion of the hydraulic fracturing, certain information regarding the hydraulic fracturing fluid.</li> <li>• The bill would require the operator, within 60 days of the cessation of hydraulic fracturing treatment, to post or cause to have posted on an Internet Web site accessible to the public specified information on the fracturing and fluid, as</li> </ul>	<p>ASSEMBLY NAT. RES.  No Hearing Date Set</p>

	<p>specified.</p> <ul style="list-style-type: none"> <li>• The bill would require a supplier claiming trade secret protection for the chemical composition of additives used in the hydraulic treatment to disclose the composition to DOGGR, but would, except as specified, prohibit those with access to the trade secret to disclose it.</li> <li>• This bill would require on or before January 1, 2016, and annually thereafter, to transmit to the Legislature and make available publicly a comprehensive report on hydraulic fracturing.</li> </ul>	
<p><b>AB 288</b> <b>(Levine D)</b> Oil and gas: hydraulic fracturing.</p>	<p>AB 288 would define "hydraulic fracturing" and require the operator of a well, at least 30 days prior to any hydraulic fracturing operations, to file with the State Oil and Gas Supervisor or the district deputy a written notice of intention to commence hydraulic fracturing.</p> <ul style="list-style-type: none"> <li>• The bill would prohibit any hydraulic fracturing operations until written approval is given by the supervisor or district deputy and would require the supervisor or district deputy to notify the operator of the approval or denial of the notice within 10 working days after the notice is submitted.</li> <li>• This bill specifies that if hydraulic fracturing has not commenced within one year of receipt of the approval notice then the approval is deemed to be cancelled</li> <li>• The bill would require immediate notification of the appropriate regional water quality control board of any approval for hydraulic fracturing.</li> <li>• The bill authorizes DOGGR to establish regulations imposing a fee to cover the costs of these requirements.</li> </ul>	<p>ASSEMBLY NAT. RES.  No Hearing Date Set</p>
<p><b>AB 649</b> <b>(Nazarian D)</b> Oil and gas: hydraulic fracturing.</p>	<p>AB 649 was gutted and amended on March 19 to define "hydraulic fracturing" in oil and gas operations.</p> <ul style="list-style-type: none"> <li>• The bill would prohibit hydraulic fracturing, as well as the use of clean freshwater for purposes of hydraulic fracturing, on any oil or gas well, if the well is located within an as yet to be specified distance of an aquifer, until the completion</li> </ul>	<p>ASSEMBLY NAT. RES.  No Hearing Date Set</p>

	<p>of a report, as specified, and a determination is made that hydraulic fracturing can be conducted without a risk to the public health, welfare, environment, or the economy of the state.</p> <ul style="list-style-type: none"> <li>The bill requires the Secretary of the Natural Resources Agency and the Secretary for Environmental Protection to convene an advisory committee by July 1, 2014, to develop a report on hydraulic fracturing. The committee must include representation from state public health, environmental justice, agriculture, academic, water agencies, and oil industry. The report shall be completed by January 1, 2018, and the Secretaries for Natural Resources and Environmental Protection shall make a determination by January 1, 2019 about the conditions under which hydraulic fracturing is permitted in California</li> </ul>	
<p><b>AB 982</b> <b>(Williams D)</b> Oil and gas: hydraulic fracturing.</p>	<p>AB 982 requires companies fracking for oil and gas to submit a plan for approval to the appropriate Regional Water Quality Control Board.</p> <ul style="list-style-type: none"> <li>The plan must include baseline water quality data, a plan to obtain water quality data near their operations, the proposed sites for monitoring and a plan for emergency monitoring in case of well failure.</li> <li>This bill also requires groundwater monitoring after fracking operations and public disclosure of all groundwater monitoring data.</li> <li>The bill additionally requires public disclosure of the quantity of water an oil company plans to use, the source of that water and a plan for disposing of waste water.</li> </ul>	<p>ASSEMBLY NAT. RES. No Hearing Date Set</p>
<p><b>AB 1301</b> <b>(Bloom D)</b> Oil and gas: hydraulic fracturing.</p>	<p>AB 1301 was gutted and amended on March 21 to define "hydraulic fracturing" and impose a moratorium on hydraulic fracturing.</p> <p>The bill would prohibit hydraulic fracturing in oil and gas operations until the Legislature enacts subsequent legislation that determines whether and under what conditions hydraulic fracturing may be conducted while protecting the public health and safety and the natural resources of the state.</p>	<p>ASSEMBLY NAT. RES. No Hearing Date Set</p>

<p><b>AB 1323</b> <b>(Mitchell D)</b> Oil and gas: hydraulic fracturing.</p>	<p>AB 1323 was gutted and amended on March 21 to mirror the content of AB 649 (Nazarian).</p> <ul style="list-style-type: none"> <li>• The bill would define "hydraulic fracturing" in oil and gas operations and would prohibit hydraulic fracturing until the completion of a report, as specified, and a determination is made that hydraulic fracturing can be conducted without a risk to the public health and welfare, environment, or the economy of the state.</li> <li>• The bill requires the Secretary of the Natural Resources Agency and the Secretary for Environmental Protection to convene an advisory committee by July 1, 2014, to develop a report on hydraulic fracturing. The committee must include representation from state public health, environmental justice, agriculture, academic, water agencies, and oil industry. The report shall be completed by January 1, 2018, and the Secretaries for Natural Resources and Environmental Protection shall make a determination by January 1, 2019 about the conditions under which hydraulic fracturing is permitted in California</li> </ul>	<p>ASSEMBLY NAT. RES.  No Hearing Date Set</p>
<p><b>SB 4</b> <b>(Pavley D)</b> Oil and gas: hydraulic fracturing.</p>	<p>SB 4 (Pavley) would define "hydraulic fracturing" and provide a comprehensive statutory framework for fracking regulations in California.</p> <ul style="list-style-type: none"> <li>• The bill would require the Secretary of the Natural Resources Agency, on or before January 1, 2015, to cause to be conducted an independent scientific study on hydraulic fracturing treatments.</li> <li>• The bill would require the Division of Oil, Gas, and Geothermal Resources, on or before January 1, 2015, to adopt rules and regulations specific to hydraulic fracturing, including governing the construction of wells and well casings and full disclosure of the composition and disposition of hydraulic fracturing.</li> <li>• Require that well operators obtain a permit for fracking. The permit application would include estimates of the amount of water and the composition of the fracking fluids planned to be used.</li> </ul>	<p>SENATE N.R. &amp; W.  Hearing Date Set : April 9, 2013</p>

	<ul style="list-style-type: none"> <li>• Require at least 30 days advance notice to the public, DOGGR and the regional water quality control board of the intent to frack a well. The well owner would also have to specifically notify DOGGR 72 hours ahead of the scheduled job in order for DOGGR to witness the procedure, if needed.</li> <li>• Allow the neighbors to have baseline and follow-up water quality testing on water wells and surface water by the regional water board.</li> <li>• Require that no fracking permits will be issued after January 1, 2015 until the independent scientific study is completed. <i>(PRC §3160e)</i></li> <li>• Require that DOGGR develop and maintain its own web-site for fracking information by January 1, 2016, although Fracfocus.org could be used in the interim.</li> <li>• The bill would require the division to perform random periodic spot check investigations during hydraulic fracturing treatments, as specified.</li> <li>• Require DOGGR to annually report to the Legislature on fracking. Specific data reporting requirements will facilitate public dissemination and ease public concerns</li> <li>• Increase the civil fine provision to at least \$10,000 and up to \$25,000 per day per violation.</li> <li>• Amend the existing oil and gas production fee that supports DOGGR to specifically include fracking-related activities.</li> </ul>	
<p><b>SB 395</b> <b>(Jackson D)</b> Hazardous substances: produced water.</p>	<p>SB 395 would enact a definition of “produced water” extracted from hydrocarbon bearing formations during oil, gas, and hydraulic fracturing operations. The bill would specify that produced waters shall be deemed to be a hazardous waste.</p>	<p>SENATE E.Q. Hearing Date Set: April 3, 2013</p>
<p><b>SB 802</b> <b>(Evans D)</b> Oil and Gas Trade Secrets</p>	<p>SB 802 would specify that that the duties of the Division of Oil, Gas, Geothermal Resources (DOGGR) shall be administered in conformance with the Uniform Trade Secrets Act. This Act specifies the rights and remedies for the misappropriation of a trade secret.</p>	<p>SENATE N.R. &amp; W. Hearing was set for April 9, 2013, but it was canceled at the</p>

		request of the author.  A new hearing date has not been set.
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# ATTACHMENT 5

## MEMBERS OF THE BOARD

PETER C. FOY , Chair  
STEVE BENNETT  
LINDA PARKS  
KATHY I. LONG  
JOHN C. ZARAGOZA



BOARD OF SUPERVISORS  
COUNTY OF VENTURA  
GOVERNMENT CENTER, HALL OF ADMINISTRATION  
800 SOUTH VICTORIA AVENUE, VENTURA, CALIFORNIA 93009

May 21, 2013

Board of Supervisors  
800 S. Victoria Avenue  
Ventura, CA 93009

**SUBJECT: Direction to CEO and Resource Management Agency Director and Request for Legal Analysis from County Counsel Regarding Hydraulic Fracturing and Old Oilfield Conditional Use Permits**

### **RECOMMENDATIONS:**

1. Direct the CEO and RMA to revise the Conditional Use Permit (CUP) application form/questionnaire to ask whether hydraulic fracturing (fracking) will be performed, what hazardous materials will be used in the drilling/post drilling operation, where the water supply for drilling and post-drilling operations including fracking will be taken from, and where any liquid wastes will be disposed.
2. Direct the County Counsel to provide the Board with a confidential legal analysis of options available to address antiquated oilfield CUPs that do not require discretionary review for new drilling, and/or do not incorporate current ordinance requirements, and/or do not provide time limits.
3. Direct the County Counsel to provide the Board with a confidential legal analysis of whether the County may restrict the use of fresh water in oilfield operations or require the use of non-fresh water when discretionary permits are issued for oil or gas well drilling or operation. Direct County Counsel to provide the Board with a confidential legal analysis of whether the County may require the use of non- or least-toxic fracking chemicals.

### **DISCUSSION:**

At our Board's April 9<sup>th</sup> hearing, we received a report from the CEO, RMA Director, and County Counsel regarding fracking. From that report and discussions with County Counsel at the meeting, it was made clear that the County has the authority to ask for a full and complete description of activities that would be authorized under any Conditional Use Permit for oil or gas well drilling and operation. Currently, the County has not routinely inquired as to whether fracking will be performed, what water source will be used for drilling and operations, what hazardous materials will be used in operations, and where waste fluids will be disposed.

To obtain accurate information, to properly inform neighbors, the public, and emergency responders, and to assure that water source and waste disposal sites are identified, the County should revise our permit application to ask the relevant questions on these topics. As County Counsel noted at the April 9<sup>th</sup> meeting, significant environmental impacts associated with these issues could then be addressed as part of the CEQA review for the drilling permit. Obtaining this information, and associated assessment of any environmental impacts, will do much to respond to the public's demand for information and environmental analysis of fracking in Ventura County. County Counsel notes that obtaining this information in the permit application will enable Ventura County to achieve similar results to Santa Barbara County's fracking-related ordinance.

The second recommended action addresses the fact that the County issued oilfield permits in the 1950's and 1960's that give carte blanche to any and all drilling and operations without any further County review, sometimes for eternity. In the twenty-first century, it is unacceptable to be saddled with antiquated and inadequate disclosure and regulatory oversight of new oil well drilling and construction, much less allow this situation to persist for eternity.

The third recommendation is to seek a legal analysis from County Counsel as to whether the County can require that non-fresh water be used in drilling, fracking, or other oilfield operations. Many local oil companies have made great strides in reducing or eliminating the use of potable water in oil field operations. It would be appropriate to ascertain whether these best operating practices can be made more widespread in our County. Ventura County's limited water supplies are essential for our residents, businesses, and agriculture, and if alternative sources can be used and fresh water supplies conserved, all will benefit. While the first recommended action will obtain information on water source, we should appropriately explore whether use of alternatives to fresh water can be made mandatory.

Lastly, there have been news reports that the major fracking operators, Halliburton and Schlumberger, have developed non-toxic or low-toxicity fracking chemicals. We seek a confidential County Counsel opinion on whether the County may require the use of these less toxic products.

Approval of the recommended actions will give the public, County staff, and our Board additional information on which to base decisions regarding fracking and oil production in Ventura County.

Cordially,



Steve Bennett,  
Supervisor, First District



Linda Parks  
Supervisor, Second District



43885 SOUTH GRIMMER BOULEVARD • P.O. BOX 5110, FREMONT, CALIFORNIA 94537-5110  
(510) 668-4200 • FAX (510) 770-1793 • www.acwd.org

**DIRECTORS**  
JAMES G. GUNTHER  
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PAUL SETHY  
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Assistant General Manager-Engineering  
SHELLEY BURGETT  
Manager of Finance  
STEVE PETERSON  
Manager of Operations and Maintenance  
ALTARINE C. VERNON  
Manager of Administrative Services

May 7, 2013

Honorable Fran Pavley  
Member of the Senate  
State Capitol, Room 4162  
Sacramento, CA 95814

Dear Senator Pavley:

Subject: Senate Bill 4- SUPPORT

On behalf of the Board of Directors of the Alameda County Water District (ACWD), I am pleased to inform you of our support for your SB 4 relating to Oil and gas production: hydraulic fracturing.

This bill would define, among other things, the terms hydraulic fracturing and hydraulic fracturing fluid. The bill would require the Secretary of the Natural Resources Agency, on or before January 1, 2015, to cause to be conducted an independent scientific study on hydraulic fracturing treatments. The bill would require an operator to apply for a permit, as specified, with the supervisor or a district deputy prior to performing a hydraulic fracturing treatment of a well and would prohibit the operator from either conducting a new hydraulic fracturing treatment or repeating a hydraulic fracturing treatment without a valid, approved permit. The bill would prohibit the approval of a permit that presents an unreasonable risk or is incomplete. The bill would prohibit the supervisor or district deputy, as of January 1, 2015, from issuing a permit to commence a hydraulic fracturing treatment, as specified, until the study is completed and peer reviewed by independent scientific experts. The bill would require the operator to provide a copy of the approved hydraulic fracturing treatment permit to specified property owners at least 30 days prior to commencing a hydraulic fracturing treatment.

The bill would require a supplier claiming trade secret protection for the chemical composition of additives used in the hydraulic treatment to disclose the composition to the division, in conjunction with a hydraulic fracturing treatment permit application, but would, except as specified, prohibit those with access to the trade secret from disclosing it. Because a violation of this bill would create a new crime, it would impose a state-mandated local program.

Honorable Fran Pavley

Page 2

May 7, 2013

The Alameda County Water District provides water service to Fremont, Newark, and Union City. As steward of the Niles Cone Groundwater Basin, ACWD is also responsible for protecting the quality of this important source of water for the community. SB 4 will provide valuable information to ACWD and, indeed, all water providers. If hydraulic fracturing were ever proposed in our area, detailed information on the chemicals to be used in the process would be critical for ACWD to adequately respond to any such proposals and to attempt to protect the public health of customers who depend on the basin for their drinking water.

For these reasons ACWD supports SB 4. If we can be of any assistance in the passage of SB 4, please feel free to contact me or ACWD's Legislative Representative Ron Davis at (916) 492-6082.

Sincerely,

A handwritten signature in black ink, appearing to read "Walter L. Wadlow", with a long horizontal line extending to the right.

Walter L. Wadlow  
General Manager



Aaron Read  
& Associates, LLC

LEGISLATIVE AND  
GOVERNMENTAL REPRESENTATION

February 28, 2013

The Honorable Fran Pavley  
California State Senate  
State Capitol, Room 4035  
Sacramento, CA 95814

RE: SB 4 – SUPPORT

Dear Senator Pavley:

On behalf of our client, the California Association of Professional Scientists (CAPS), I am writing to inform you of their support for SB 4 requiring, among other things, scientist at DTSC, the State Water Resources Control Board and the Air Resources Board to review the currently unknown chemicals being used in the fracking process. The Monterey Shale formation, the largest of its kind by far in the country, may lead to increased hydraulic fracturing activity in California. Fracking is a potentially major environmental and public health concern, and this is the time for policymakers and regulators to get out ahead of this emerging shale oil "play" and establish sensible regulations for the industry.

We know there are many issues to be dealt with surrounding fracking. The current version of the bill seems to allow for disclosure of the chemicals used during the fracking process 30-days following the conclusion of the hydraulic fracturing. If this is the case, we are concerned that it will be nearly impossible to protect drilling workers, regulators and the public from exposure to these chemicals 30-days after they have been exposed. We would suggest that the chemicals that will be used, be disclosed 90-days prior to the start of the hydraulic fracturing.

Thank you for introducing this important piece of legislation and we look forward to working with you on its successful passage. If you have any questions regarding our position, please feel free to call me at (916) 448-3444.

Sincerely,

PATRICK MORAN  
Legislative Advocate

PM:ds  
6.010.13

---

1415 L STREET, SUITE 1100, SACRAMENTO, CALIFORNIA 95814  
TEL: 916/448-3444 FAX: 916/448-0430



**CALIFORNIA COASTAL PROTECTION NETWORK**  
2920 Ventura Drive, Santa Barbara, CA 93105 - 805-837-3037  
WWW.COASTALADVOCATES.COM

April 2nd, 2013

The Honorable Fran Pavley, Chair and Members  
Senate Natural Resources and Water Committee  
State Capitol, Room 4035  
Sacramento, CA 95814

**RE: SB 4 (Pavley) – SUPPORT**

Dear Chair Pavley and Members of the Committee,

The California Coastal Protection Network, a 501C3 non-profit whose mission it is to monitor and enhance coastal protection in California, would like to express its support for SB 4 (Pavley). SB 4 seeks to implement comprehensive regulation over hydraulic fracturing or 'fracking' in California.

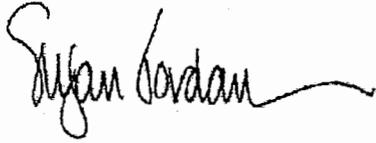
In the last year and a half, it has become painfully apparent that California's existing regulatory authority over the widespread and growing practice of 'fracking' has been woefully inadequate. After much prodding, California's Department of Conservation's Division of Oil, Gas, and Geothermal Resources (DOGGR) initiated a series of public workshops and then released a 'discussion draft' of proposed fracking regulations. Unfortunately, that draft is widely viewed as inadequate to address the most pressing concerns about transparency or regulatory accountability.

While there are a number of different viewpoints within the environmental community on how California should deal with the current situation ranging from calling for an immediate ban on all fracking operations or instituting a moratorium on fracking until more comprehensive regulations are in place, it is unclear if either of these two options will be instituted this legislative session. In the absence of any assurance that fracking will be halted permanently or even temporarily in California, it is of the utmost importance that regulatory oversight over the fracking that is happening in real time be strengthened and implemented as soon as possible.

SB 4 takes the first step toward implementing a comprehensive regulatory framework to govern fracking operations in California. While some elements of the bill raise concerns, particularly the language addressing trade secret protection for fracking fluid, CCPN nonetheless believes that the essential structure of the bill is sound and hopes that the section dealing with trade secrets is improved as SB 4 makes its way through the policy committee review process.

CCPN urges an AYE vote on SB 4 (Pavley) and thanks the author for her leadership on this issue.

Sincerely,

A handwritten signature in black ink that reads "Susan Jordan" with a decorative flourish at the end.

Susan Jordan, Director



April 24, 2013

Senator Jerry Hill  
Chair, Senate Committee on Environmental Quality  
State Capitol  
Sacramento, CA 95814

**Re: SB 4 (Pavley) Hydraulic Fracturing – SUPPORT**

Dear Senator Hill,

On behalf of the California League of Conservation Voters, I am writing in support of Senate Bill 4 addresses the environmental issues inherent in the practice of hydraulic fracturing or “fracking.” SB 4 would provide a comprehensive framework for fracking regulation in California, which is long overdue.

California currently has no regulations specific to fracking. The state’s oil and gas regulatory agency, the Division of Oil, Gas and Geothermal Resources (DOGGR), does not know where fracking takes place, how much water is used by each frack job, what chemicals are in the fracking fluid and in what concentrations, or what environmental, health, and seismic impacts are resulting from fracking operations within the state. This troubling situation is exacerbated by the oil industry’s likely exploitation over the next few years of a massive geologic formation in central California known as the Monterey Shale, which reportedly contains up to 15 billion barrels of potentially recoverable oil. Industry will likely need to employ fracking and other advanced recovery techniques to extract that oil. SB 4 will require, among other things, an independent scientific study on fracking, the adoption of comprehensive fracking regulations by DOGGR, and formal agreements between DOGGR and other agencies to ensure regulatory accountability. Moreover, SB 4 will require well operators for the first time to obtain a permit from DOGGR specifically for fracking, and will prevent DOGGR from issuing any fracking permits after a certain date until the fracking study is complete. These provisions and others in the bill will go a long way toward filling the many regulatory gaps that presently exist regarding fracking activities in California.

For the reasons stated above, we urge your support of Senate Bill 4.

Thank you,  
Jena Price  
California League of Conservation Voters

California League of Conservation Voters | [ecovote.org](http://ecovote.org)

6310 San Vicente Blvd., Suite 425 Los Angeles, CA 90048  
350 Frank H. Ogawa Plaza, Suite 1100 Oakland, CA 94612

phone: 323-939-6790 fax: 323-939-6791  
phone: 510-271-0900 fax: 510-271-0901

SENATE  
CALIFORNIA LEGISLATURE



GILBERT A. CEDILLO  
SENATOR, TWENTY SECOND DISTRICT (retired)

May 16, 2013

To Members of the Appropriation Committee:

It is my understanding that SB 4 is scheduled for a vote in your Committee. I write to express my strong support for SB 4.

Despite its wide spread use and recent success in California, the impact of fracking on environmental health and public safety still leave many questions unanswered. After extensive research from other states as well as the feds, Senator Pavley co-chaired a legislative informational hearing last March with the sole intention of crafting comprehensive, yet reasonable set of rules that would regulate the practice of fracking.

True to form, SB 4 provides a comprehensive statutory framework for fracking regulation. It also addresses the very issue that all legislators once in offices are sworn to protect: public safety. It is for this reason that I support SB 4 and I strongly urge my former colleagues to do the same.

Sincerely,

A handwritten signature in cursive script that reads "Gil Cedillo".

Gilbert A. Cedillo  
State Senator (retired)



# City of Malibu

Lou La Monte, Mayor

23825 Stuart Ranch Road · Malibu, California · 90265-4861  
Phone (310) 456-2489 · Fax (310) 456-3356 · [www.malibucity.org](http://www.malibucity.org)

April 3, 2013

*Sent via email to [Kara.Seward@sen.ca.gov](mailto:Kara.Seward@sen.ca.gov)*

The Honorable Fran Pavley  
California State Senate District 23  
State Capitol, Room 4035  
Sacramento, CA 95814

RE: SB 4 – Fracking Regulatory Framework – SUPPORT

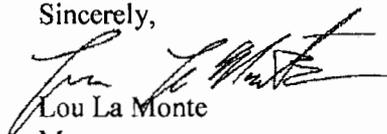
Dear Senator Pavley:

I write to you today, not as the Mayor of Malibu, but as a concerned citizen and resident of the great State of California. There are well-documented hazards and risks to public, occupational and environmental health and safety associated with the practice of hydraulic fracturing (or “fracking”) of wells both across the country and throughout the world. These include air and water contamination associated with poor handling practices, spills and well and well-casing failures, as well as induced seismicity associated with disposal of waste fluids in injection wells, illegal dumping of the fluid wastes and accelerated roadway deterioration, among others. The fracking of oil and gas wells is essentially an industrial project – including heavy equipment, chemicals and significant amounts of noise and dust – and it makes no sense that the neighbors of the wells are not provided advance notice of and protection from these activities, as they are in other states. Here in California, existing and planned state regulation is completely inadequate. To this day – despite years of public outcry – no state regulator can provide accurate and comprehensive information about the extent of fracking or an assessment of its risks. This lack of progress, despite existing authority, is inexcusable.

The legislation you have proposed, SB 4, is a straightforward and common sense bill that seeks to provide explicit direction on fracking to state-level regulators in order to provide public transparency and regulatory accountability. It requires that an independent, peer-reviewed scientific study that includes public health be conducted and institutes a fracking permitting system with pre- and post-fracking disclosure – including chemical information – necessary to assess the frack job. Importantly, no permits can be issued until the study is completed and the health and safety of Californians and their environment is protected. I am especially pleased that SB 4 also includes advance public and neighbor notice of fracking, baseline and follow-up ground- and surface water testing and other provisions.

As a resident of California, I am proud to lend you my support for the passage of SB 4, so that California will no longer lag the many states that already have similar laws and regulations in place.

Sincerely,



Lou La Monte  
Mayor

cc: Honorable Members of the Malibu City Council



CARMEN RAMÍREZ  
Councilmember

City Council Office  
300 West Third Street • Oxnard, CA 93030 • Cell: (805) 890-7088  
City Tel: (805) 385-7430 • City Fax: (805) 385-7595  
e-mail: Carmen4oxnard@gmail.com

April 5, 2013

Senator Fran Pavley  
California Senate, District 27  
State Capitol Room 4035  
Sacramento, CA 95814

Re: Senate Bill 4

Dear Senator Pavley,

I am pleased to support Senate Bill 4, which you have introduced to finally provide a framework, which will ultimately protect California's precious water supply from any harm done by "fracking" technology.

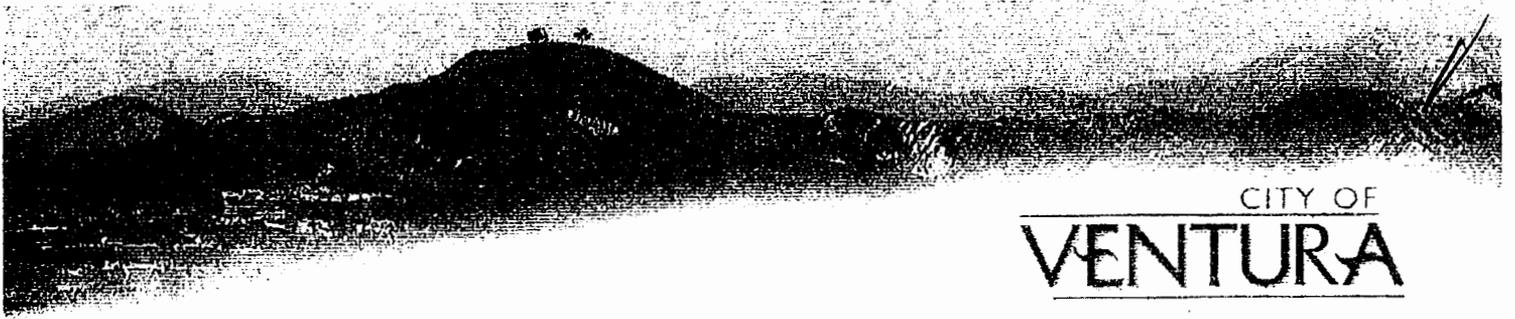
As you know here in Oxnard, we are very aware of how precious, limited and costly our water supply is. Without clean water to drink and for agriculture and industry, we will not have either a healthy economy or people.

Thank you for introducing your common sense measures which will provide information and protection for California consumers and businesses.

I will encourage my colleagues in the City of Oxnard and in the County of Ventura to lend their support your Senate Bill 4 as well.

Sincerely,

Carmen Ramirez  
Mayor Pro Tem



CITY OF  
**VENTURA**

March 29<sup>th</sup>, 2013

Senator Fran Pavley

State Capital, Room 4035

Sacramento, Ca. 95814

City Council

Mike Tracy, Mayor  
Cheryl Heitmann, Deputy Mayor  
Neal Andrews, Councilmember  
Brian Brennan, Councilmember  
James L. Monahan, Councilmember  
Carl E. Morehouse, Councilmember  
Christy Weir, Councilmember

Dear Senator Pavley,

I'm writing this letter in support of your bill SB 4 which provides a comprehensive statutory framework for fracking regulation in California. In my role both as a locally elected Ventura City Councilman and as a member of the California Coastal Commission, I am acutely aware of the controversial issues surrounding fracking.

Some of the reasons I'm supporting this legislation is that it require an independent scientific study on fracking addressing occupational, public and environmental health and safety along with addressing induced seismicity associated with fracking. Those provisions along with requiring DOGGR to adopt fracking regulations that include full disclosure of the composition and disposition of hydraulic fracturing fluids with trade secret protection go a long way in addressing the majority of the concerns that my constituents have shared with me.

I realize this is an extremely emotional issue acerbated by the public health concerns and environmental degradation that has occurred on the East Coast. I firmly believe that with passage of SB 4 much of the needed safeguards will be put in place that will allow California to pursue energy independence in a safe and practical manor.

All the Best,

Brian Brennan  
Ventura City Council



# CLEAN WATER ACTION

CALIFORNIA

April 2, 2013

Senator Fran Pavley  
State Capitol, Room 4035  
Sacramento, CA 95814  
Fax: 916-324-4823

Clean Water Action  
Oakland Office

350 Frank Ogawa Plaza #200  
Oakland, CA 94612  
P: 415-369-9160  
F: 415-369-9180

**Re: Support if Amended SB 4 (Pavley)**

Dear Senator Pavley:

On behalf of Clean Water Action and our 60,000 California members, I am writing to thank you for introducing SB 4 and to state our position of support if amended. Clean Water Action thanks you for your leadership on this important issue and hopes to support your efforts to compel greater accountability, transparency and safety for fracking.

The State's current lack of regulatory framework and the shortcomings of the Division of Oil Gas and Geothermal Resources (DOGGR) discussion draft regulations on hydraulic fracturing, indicate a clear need for legislative efforts to protect our state.

SB 4 provides many requirements that are necessary to protect California from fracking including:

- An independent scientific study to evaluate the hazards and risks of fracking;
- A moratorium on the practice if the study is not completed in a timely manner;
- A permitting process for hydraulic fracturing;
- Advance notice to neighboring property owners;
- Reporting and disclosure of key information, such as chemical use, wastewater disposition, water quantity and source;
- The opportunity for monitoring groundwater for neighboring water users; and
- Coordination between state agencies for more effective regulations on fracking.

However, Clean Water Action recommends the following amendments in order to improve health and safety protections and transparency:

**Definition of hydraulic fracturing:**

Since not all hydraulic fracturing operations utilize proppants and hydraulic fracturing fluid, a more inclusive definition is necessary to effectively cover all operations that may be considered hydraulic fracturing. We recommend amending section 3152 to read:

“Hydraulic fracturing” means the injection of fluids or gases into an underground geologic formation with the intention to cause or enhance fractures in the underground geologic formation, in order to cause or enhance the production of oil or gas from a well. Alternate terms include, but are not limited to, “fracking,” “hydrofracking,” and “hydrofracturing.”

#### Trade Secrets:

We have several problems with the trade secret provisions in the bill. First and foremost, the denial of the public's right to know what chemicals or substances are being used at sites that threaten air and water quality as well as public health is a denial of an essential and fundamental right. There should be some balance between the protection of the corporate financial interest in maintaining a competitive marketplace advantage and the right of the public to protect itself and be assured that it is safe from harm. However, the right to claim a trade secret, as outlined in the current draft is unfettered. There is no opportunity place where the public interest in having the information may outweigh the corporate financial interest. This is wrong. We propose that the Division have the discretion to deny a trade secret claim based on a finding that there is an overriding public interest in having access to the information.

Furthermore, DOGGR and well operators should have some responsibility for ensuring that additives used by the supplier are both safe and legal. In order to ensure that the chemicals proposed for use on site are safe and legal, trade secrets claims must be must occur with the permit application. The Division should consider the validity of the trade secret claim along with the rest of application. DOGGR should be responsible for determining that the trade secret claim is valid before approving a permit. In addition, the well operator should bear some responsibility for determining that the additives used in its facility are both safe and legal. The well operator can still be required to maintain the confidentiality of the information by being required to sign non-disclosure agreements, which are used all the time by companies in protection of their trade secrets or confidential business information.

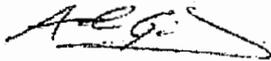
There are very specific legal criteria for what constitutes a valid trade secret. Typically, for a trade secret claim to be valid, the claimant must have made a substantial investment in keeping the information secret, the information must not be publicly available or easily discoverable by its competitors (including through reverse engineering), and public disclosure of the information must compromise a company's competitive marketplace advantage and threaten substantial financial loss. As drafted, SB 4 does not require those who claim information as trade secret to demonstrate that any of these criteria for trade secret validity are met. Suppliers must be required to substantiate trade secret claims and demonstrate that they are justified and DOGGR must be required to review the claims to ensure that they are adequately justified. An unsubstantiated trade secret claim should not suffice for denying something as important as the public's right to know about pollutants that may threaten their health and the environment.

In addition, trade secrets do not last indefinitely. They are based on the idea that information is confidential and remains confidential. In the real world, oil and gas extraction processes are common

knowledge in the industry. Most of the industry already knows what additives are typically used under certain conditions. If a company develops a new process or mixture of additives, it's likely that such mixtures will be discovered by other companies and won't remain unique to one supplier. Therefore, trade secret claims should not last indefinitely. We propose that trade secret claims must be re-asserted at least every five years, and that each time the claimant must demonstrate that the information is indeed confidential and that its public disclosure will cause financial loss to the company.

Thank you very much for considering these amendments. We look forward to continuing to work with you and the committee on SB 4. We thank you for your leadership on hydraulic fracturing and look forward to supporting your efforts to protect California from this dangerous practice.

Sincerely,

A handwritten signature in black ink, appearing to read "A. Grinberg", with a stylized flourish at the end.

Andrew Grinberg  
Oil and Gas Program Coordinator  
415-369-9172  
agrinberg@cleanwater.org

4035



# COUNTY OF LOS ANGELES Sacramento Legislative Office

1100 K Street, Suite 400, Sacramento, California 95814  
(916) 441-7888 • Fax (916) 445-1424  
<http://ceo.lacounty.gov>

Board of Supervisors  
GLORIA MOLINA  
First District

MARK RIDLEY-THOMAS  
Second District

ZEV YAROSLAVSKY  
Third District

DON KNABE  
Fourth District

MICHAEL D. ANTONOVICH  
Fifth District

WILLIAM T FUJIOKA  
Chief Executive Officer

April 4, 2013

ALAN FERNANDES  
Chief Legislative Representative

APR 8 - 2013

The Honorable Fran Pavley, Chair  
Senate Natural Resources and Water Committee  
State Capitol, Room 4035  
Sacramento, CA 95814

**RE: SB 4 (PAVLEY), As amended March 11, 2013 – SUPPORT  
Relating to Oil and gas: hydraulic fracturing  
Set in Senate Natural Resources and Water Committee on April 9, 2013**

Dear Senator Pavley:

The Los Angeles County Board of Supervisors supports SB 4, which would provide an enhanced statutory framework for oil and gas hydraulic fracturing (fracking) regulation in California.

Specifically, SB 4 would, among other things, [1] require the California Division of Oil, Gas, and Geothermal Resources (DOGGR) to adopt fracking regulations by January 15, 2015, that include full disclosure of the composition and disposition of hydraulic fracking fluids and provide trade secret protection for chemical formulas; [2] mandate that well operators obtain fracking permits and provide at least 30 days advance notice to DOGGR, the public, and the Regional Quality Control Board of intent to frack a well; [3] direct that an independent scientific study on fracking be conducted by January 1, 2015; and [4] allow for baseline and follow-up water quality testing on water wells and surface water by the regional water board.

SB 4 would fill today's fracking regulatory gap and ensure that such activity will be done in a manner that protects the public's health and safety.

Sincerely,

ALAN N. FERNANDES  
Chief Legislative Representative

ED BERENDS  
Legislative Representative

c: Each Member and consultant,  
Senate Natural Resources and Water Committee

MOTION BY SUPERVISOR ZEV YAROSLAVSKY

April 2, 2013

In 2005, Congress passed, and President George W. Bush signed, legislation that prohibited the United States Environmental Protection Agency ("EPA") from regulating hydraulic fracturing ("fracking") under the Safe Drinking Water Act. Among the theories put forward as to why this legislation was sound public policy was the notion that the States could and would regulate fracking without the federal government's involvement. However, more than seven years later, and despite the fact that the EPA is taking a second look at whether fracking should be subjected to national oversight, the State of California has not yet filled this regulatory gap. Fortunately, the State legislature and Governor Brown now have the opportunity to appropriately regulate fracking and protect public health and safety. The Board of Supervisors should support their efforts to do so.

As background, the oil and gas industry has increasingly used fracking to extract oil and natural gas in the Los Angeles region. Fracking pumps chemicals, gels, foams, fluids, or compressed gases into the earth in order to crack open underground rock formations and release underlying oil and natural gas. The practice has become

MOTION

*On 4/2/13  
 Yaroslavsky, Molina  
 Ridley - Thomas - AYE  
 Knabe & Antonovich - NO  
 Passed 3-2*

MOLINA	_____
YAROSLAVSKY	_____
KNABE	_____
ANTONOVICH	_____
RIDLEY-THOMAS	_____

increasingly widespread and is raising concerns about environmental impacts, particularly with regard to potential groundwater contamination and the possibility that fracking can induce seismic activity.

Despite Congress' apparent assumption that the States would act to protect public health and safety, the State of California does not currently require oil companies to disclose the location of wells in which fracking is used, or what chemicals are used in the fracking process.

The State has released draft fracking regulations through the California Division of Oil, Gas, and Geothermal Resources ("DOGGR"); however these fail to address the public's concern about potential health, environmental, and water supply contamination issues. Furthermore, legislative informational hearings held in February 2013 revealed poor coordination between regulators, significant gaps in regulation, and a lack of available data related to disposal of water used in the fracking process.

Senate Bill 4 by Senator Fran Pavley addresses those issues by providing a comprehensive statutory framework for fracking regulation in California. Specifically, the bill would, among other things: 1) require that DOGGR adopt fracking regulations by January 1, 2015 that include full disclosure of the composition and disposition of hydraulic fracking fluids and provide trade secret protection for chemical formulas; 2) mandate that well operators obtain a permit for fracking and provide at least 30 days advanced notice to DOGGR, the public, and the Regional Water Quality Control Board of intent to frack a well; 3) direct that an independent scientific study on fracking addressing occupational, public, and environmental health and safety issues, including induced seismicity, be conducted by January 1, 2015; and 4) allow for baseline and

follow-up water quality testing on water wells and surface water by the regional water board. The provisions of SB 4 will ensure transparency and accountability needed to protect the State's air quality, environment, and water supply.

This bill and other legislative efforts that would fill the regulatory gap and ensure that any fracking that occurs in California would be done in a manner that protects public health and safety deserve the Board's support.

**I, THEREFORE, MOVE** that the Board of Supervisors:

- 1) Support Senate Bill 4 (Pavley) and other fracking-related legislation that would provide at least SB 4's level of protection for public health and safety;
- 2) Instruct the County's legislative advocates in Sacramento to take appropriate actions to ensure passage of this legislation; and,
- 3) Notify the Board of Supervisors of any substantive revisions that modify the intent of **SB 4.**

ABK S:\Fracking

BEFORE THE BOARD OF SUPERVISORS  
OF THE COUNTY OF SANTA CRUZ, STATE OF CALIFORNIA

RESOLUTION NO. 65-2013

On the motion of Supervisor Leopold  
duly seconded by Supervisor McPherson  
the following resolution is adopted

RESOLUTION SUPPORTING THE PASSAGE OF SENATE BILL 4

WHEREAS, on February 12, 2013, the Board of Supervisors unanimously passed a resolution expressing concerns about the proposed regulations for hydraulic fracturing (fracking) in California; and

WHEREAS, among other things, the Board called for full disclosure of all chemicals used in hydraulic fracturing, expanding public notification prior to fracking, and baseline and follow-up testing of the groundwater; and

WHEREAS, Senator Fran Pavley's comprehensive fracking bill, Senate Bill 4, has the over-arching goals of promoting public transparency and regulatory accountability while providing a common sense statutory framework to address the risks and potential risks to public and environmental health and safety associated with fracking; and

WHEREAS, the data that would be collected through the provisions of this bill would allow informed decision-making about fracking, particularly with respect to air and water quality and water supply; and

WHEREAS, the revised advance notice requirements would facilitate local efforts related to fracking; and

WHEREAS, this bill is needed because studies and reports from other states and by the federal government indicate there are numerous instances where fracking and fracking-related activities pose or have the potential to pose hazards to public, occupational and environmental health and safety; and

WHEREAS, Senate Bill 4 is supported by the California Association of Professional Scientists and is co-authored by Senator Bill Monning.

NOW, THEREFORE, BE IT RESOLVED, that the Santa Cruz County Board of Supervisors hereby supports the passage of Senate Bill 4.

65.2

RESOLUTION SUPPORTING THE PASSAGE OF SENATE BILL

Page 2

PASSED AND ADOPTED by the Board of Supervisors of the County of Santa Cruz, State of California, this 19th day of March, 2013, by the following vote:

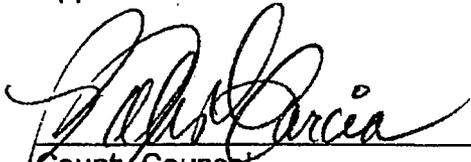
AYES: SUPERVISORS Leopold, Friend, Caput, McPherson and Coonerty  
NOES: SUPERVISORS None  
ABSENT: SUPERVISORS None

NEAL COONERTY

NEAL COONERTY, Chairperson  
Board of Supervisors

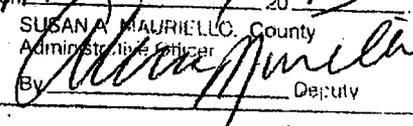
ATTEST: TESS FITZGERALD  
Clerk of said Board

Approved as to form:

  
County Counsel

DISTRIBUTION: Senator Fran Pavley  
Senator Bill Monning  
Assemblymember Mark Stone  
Assemblymember Luis Alejo  
Governor Jerry Brown  
Santa Cruz Sierra Club  
County Counsel

1502H3

STATE OF CALIFORNIA )  
COUNTY OF SANTA CRUZ ) ss  
I, SUSAN A. MAURIELLO, County Administrative Officer and ex-officio Clerk of the Board of Supervisors of the County of Santa Cruz, State of California do hereby certify that the foregoing is a true and correct copy of the resolution passed and adopted by and entered in the minutes of the said board. In witness whereof, I have hereunto set my hand and affixed the seal of the said Board on March 20, 2013  
SUSAN A. MAURIELLO, County Administrative Officer  
By  Deputy

65.2

March 28, 2013

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

RE: SB 4 (Pavley): Oil & Gas: Hydraulic Fracturing – **SUPPORT**  
**Senate Committee on Natural Resources & Water – April 9, 2013**

Dear Senator Pavley:

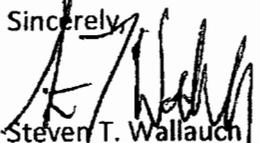
On behalf of the Ventura County Board of Supervisors, I extend the County's support for your bill, SB 4, which provides a comprehensive framework for the regulation of hydraulic fracturing in California.

Ventura County is highly dependent on local groundwater resources for potable water, and groundwater is the lifeblood of the County's \$1 billion-plus agricultural industry. Protection of local groundwater aquifers is essential for continuation of economic activity and domestic water supply. The County is concerned that the practice of hydraulic fracturing of oil and gas wells is currently unregulated and possibly undisclosed.

Ventura County supports the protections in SB 4. Ventura County encourages the adoption of legislation that requires public disclosure, assures protection of groundwater, requires the reporting of the source and amount of water used, and assures that wastewater disposal does not pose a significant risk to water supplies, people, or the natural environment.

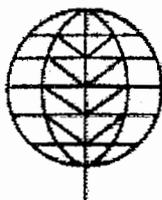
Ventura County has historically balanced oil and gas production and the jobs it brings with the protection of our natural and agricultural resources. It is important that this balancing continue to occur. Therefore, on behalf of the Ventura County Board of Supervisors, thank for introducing SB 4.

Sincerely,



Steven T. Wallaich  
Legislative Advocate

Cc: Members and Consultant to the Senate Committee on Natural Resources & Water  
Ventura County Board of Supervisors



## EARTHWORKS

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April 19, 2013

Senator Jerry Hill, Chair  
Senate Environmental Quality Committee  
State Capitol, Room 2205  
Sacramento, CA 95814  
Fax: (916) 322-3519  
*Delivered via fax mail*

Re: Senate Bill 4 (Pavley) – Support if Amended

Dear Chairman Hill:

On behalf of Earthworks and its California members, I am writing to assert Earthworks' support if amended position for Senate Bill 4 (SB 4). Earthworks, a national 501(c)(3) nonprofit organization, is dedicated to protecting communities and the environment from irresponsible energy and mineral development while securing sustainable energy solutions.

SB 4 would implement an essential regulatory system for hydraulic fracturing operations in the State of California that would improve the transparency, safety, and oversight of this potentially dangerous practice. Since fracking is not currently regulated by California or federal law, there is a clear need for prompt legislative action to close this massive regulatory gap. Earthworks supports many aspects of SB 4, including the provisions that require the following:

- An independent scientific study to evaluate the risks of fracking;
- Rules and regulations for fracking operations, including a mandatory update to incorporate the results of the independent study;
- Critical reporting and disclosure requirements for the main aspects of fracking operations, including chemical use, wastewater disposition, water quantity, water source, and unique geologic features in the vicinity of wells that could limit or facilitate the migration of fluids outside of the fracked zone;
- Formal agreements between state agencies that clearly identify their respective authorities, including plans for air and water quality monitoring;
- A permitting process for fracking operations, including requirements for public disclosure of permits once they are obtained;
- A moratorium on issuing permits prior to completion of the independent scientific study;
- Advanced notice of fracking operations to neighboring property owners;
- Operation of an informative website where the public can access data on California fracking operations; and
- A civil penalty for violating the new requirements.

However, the language of SB 4 can and should be strengthened. Earthworks requests that the Environmental Quality Committee consider the following amendments, along with any other amendments that would improve the protective nature of SB 4's proposed regulatory system:

1. Remove all provisions that provide disclosure exemptions for alleged trade secrets.

Earthworks believes that the protections for trade secrets in SB 4 are unnecessary and too expansive. Trade secret claims are already regulated by a comprehensive process outlined in the California Public Records Act, and should not be regulated by an additional system that only applies to one type of permit. In addition, the process for claiming trade secrets in SB 4 would allow companies to avoid disclosing their fracking fluid chemicals until 30 days after a well has already been fracked. This delayed disclosure would greatly threaten public health – both the public and the government agencies that are responsible for protecting California's citizens and environment need to know which chemicals are being used before fracking occurs. Therefore, Public Resources Code § 3160(j), and all other language that references trade secret claims, should be removed from SB 4.

2. Revise the definition of "hydraulic fracturing" to be more inclusive.

Since it is not clear that all hydraulic fracturing operations use proppants and hydraulic fracturing fluid, SB 4 should have a broader definition of hydraulic fracturing to ensure that all fracking operations are regulated. Earthworks proposes the following revision to Public Resources Code § 3153:

“Hydraulic fracturing” means the injection of fluids or gases into an underground geologic formation with the intention to cause or enhance fractures in the underground geologic formation, in order to cause or enhance the production of oil or gas from a well. Alternate terms include, but are not limited to, “fracking,” “hydrofracking,” and “hydrofracturing.”

This revision would also make SB 4's definition of hydraulic fracturing consistent with other bills that are being considered by the state legislature, including Assembly Bill 982 (Williams).

3. Add mandatory requirements for water quality monitoring.

SB 4 calls for water quality monitoring only if a surface property owner requests it for drinking water or agricultural purposes. Public Resources Code § 3160(d)(6). This limited trigger for monitoring should be revised to mandate water quality monitoring before and after fracking occurs. A comprehensive monitoring scheme for groundwater and surface water is essential to ensuring the safety of fracking operations.

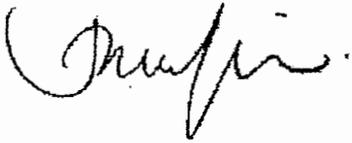
4. Require fracking permit applications to include information on the operator's plans for wastewater disposition.

The permitting system proposed in Public Resources Code § 3160(d) requires permit applicants to include crucial information about their fracking operations, but omits any

requirements for wastewater. Instead, Public Resources Code § 3160(d)(1) should be revised to include an additional provision that requires permit applicants to disclose where they intend to store, transport, or dispose of wastewater from fracking operations.

Thank you for considering these amendments and for your leadership on this important matter. Earthworks welcomes the opportunity to work with you and your staff to amend the language of SB 4 to ensure that it imposes a comprehensive and effective regulatory system for hydraulic fracturing.

Sincerely,



Jennifer Krill  
Executive Director  
Earthworks  
2150 Allston Way, Suite 460  
Berkeley, CA 94704  
Phone: (202) 877 - 1872, Ext. 103  
Email: [jkrill@earthworksaction.org](mailto:jkrill@earthworksaction.org)



**environmental**  
**DEFENSE CENTER**

April 2, 2013

Senate Committee on Natural Resources and Water  
Senator Fran Pavley, Chair  
State Capitol, Room 4035  
Sacramento, CA 95814  
*Via email to [katharine.moore@sen.ca.gov](mailto:katharine.moore@sen.ca.gov)*

Senate Committee on Natural Resources and Water  
Senator Bill Monning  
State Capitol, Room 4035  
Sacramento, CA 95814  
*Via email to [bethany.westfall@sen.ca.gov](mailto:bethany.westfall@sen.ca.gov)*

**SB 4 (Pavley): SUPPORT**

Dear Chair Pavley and Senator Monning:

On behalf of Environmental Defense Center (EDC), I am writing to express my organization's support for committee approval of your bill, SB 4, which would provide an urgently-needed comprehensive framework for the regulation of hydraulic fracturing, or 'fracking', in the state of California.

EDC is a nonprofit public interest environmental law firm serving San Luis Obispo, Santa Barbara, and Ventura Counties. EDC was formed in response to the 1969 Santa Barbara oil spill, and has represented local organizations in their efforts to prevent environmental damage from offshore and onshore oil production for more than 25 years. A large part of EDC's service area is underlain by the Monterey Shale formation, the epicenter of a potential new California oil rush driven by fracking and other enhanced oil recovery techniques.

While the state of California is widely regarded as the nation's leader on environmental issues, our state lags far behind other major oil and gas producing states in the development of a legal and regulatory framework to address fracking and the significant risks it poses to the public health, safety, and the natural environment. Indeed, the state's primary oil regulator—the Division of Oil, Gas & Geothermal Resources (DOGGR)—has failed to develop any specific rules to track or manage the practice of fracking, despite existing statutory authority. Consequently, no one but the oil industry

Chair Fran Pavley and Senator Monning  
April 2, 2013  
Page 2

truly knows the location, extent, or frequency of fracking, the source and volume of water used, or what chemicals are being utilized in fracking fluid in the state of California.

SB 4 would help remedy this unacceptable status quo by, among other things, requiring oil companies to apply for a permit prior to fracking; prohibiting approval of a permit that presents an unreasonable risk or is incomplete; requiring prior notice of fracking to surface property owners and neighbors; providing property owners with the right to request water quality sampling and testing prior to fracking; establishing civil penalty provisions; and requiring post-fracking disclosure of fracking chemicals, as well as the source, volume, composition, and disposition of water used and recovered.

In addition, SB 4 would help safeguard principles of scientific integrity and accountability in relation to the current DOGGR rulemaking process, by requiring the Secretary of Natural Resources to conduct an independent scientific study addressing all aspects of hydraulic fracturing by January 1, 2015, and requiring that DOGGR's fracking regulations (if final before that date) be revised to incorporate the results of that scientific study.

We look forward to working with you and the Committee to craft and enact a final bill that will mandate transparency, accountability, and robust protection of the environment and public health in relation to hydraulic fracturing conducted within California. We thank you for your consideration of our views, and for your continuing leadership in protecting California's environment.

Sincerely,



Brian Segee  
Staff Attorney

cc Senator Anthony Cannella (Vice Chair) (via email to [sharon.gonsalves@sen.ca.gov](mailto:sharon.gonsalves@sen.ca.gov))  
Senator Noreen Evans (via email to [tom.roth@sen.ca.gov](mailto:tom.roth@sen.ca.gov))  
Senator Jean Fuller (via email to [todd.moffit@sen.ca.gov](mailto:todd.moffit@sen.ca.gov))  
Senator Hannah Beth-Jackson (via email to [kk.holland@sen.ca.gov](mailto:kk.holland@sen.ca.gov))  
Senator Ricardo Lara (via email to [catalina.hayes-bautista@sen.ca.gov](mailto:catalina.hayes-bautista@sen.ca.gov))  
Senator Lois Wolk (via email to [jim.metropulos@sen.ca.gov](mailto:jim.metropulos@sen.ca.gov))

Sacramento Office  
1107 9<sup>th</sup> Street,  
95814  
916-333-0566  
Fax 916-4423610

April 23, 2013

Senator Jerry Hill, Chair  
Senate Environmental Quality Committee  
State Capitol, Room 2205  
Sacramento, CA 95814

Re: SB 4 (Pavley): Support

Dear Senator Hill:

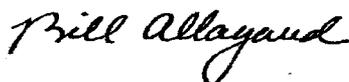
The Environmental Working Group supports Senator Pavley's SB 4, which will require the disclosure of important information when a well is fracked in California. Even though fracking has occurred in California for over 50 years, California has no regulations specific to fracking. The state's oil and gas regulatory agency, the Division of Oil, Gas and Geothermal Resources (DOGGR), can not tell us where fracking has taken place, how much water was used by each frack job, what chemicals were injected into the earth and at what concentrations, or what environmental, health, and seismic impacts have resulted or could result from fracking.

Today, DOGGR is finally going about preparing regulations for fracking but using the evidence of their first set of draft regulations, EWG feels that it is critical that the Legislature weigh in at this time. SB 4 is a comprehensive bill that gives guidance to DOGGR as to what would constitute a more thorough approach to regulating this aspect of the oil and gas industry. SB 4 will require, among other things, public notice to surrounding property owners in advance of drilling, and formal agreements between DOGGR and other agencies to ensure regulatory accountability, will require well operators for the first time to obtain a permit from DOGGR specifically for fracking, and will prevent DOGGR from issuing any fracking permits after a certain date until a study on the impacts of fracking is complete.

These provisions and others in the bill will go a long way toward filling the many regulatory gaps that presently exist regarding fracking activities in California. EWG is concerned about how trade secrets are handled in the bill and would like to stay engaged with Senator Pavley and the policy committees to resolved this issue in a manner that will be protective of the public's right to know when cancer-causing or poisonous chemicals are being injected through or near their property.

SB 4 is a critical piece of legislation to help ensure that DOGGR produced regulations that will be comprehensive and we urge its passage.

Sincerely,



Bill Allayaud  
CA Director of Governmental Affairs



## LEAGUE OF WOMEN VOTERS® OF CALIFORNIA

April 5, 2013

The Honorable Fran Pavley, Chair  
 Committee on Natural Resources and Water  
 California State Senate  
 P.O. Box 942848  
 Sacramento, CA 94248-0001

**Re: SB 4—SUPPORT**

Dear Senator Pavley:

The League of Women Voters of California supports SB 4, your comprehensive bill on hydraulic fracturing (fracking).

SB 4 will establish the legislative guidance that is needed for the ongoing regulatory process, in which the LWVC has been participating. It provides for a scientific study of occupational and public health and safety, as well as environmental effects; such a study is sorely needed. And it provides for disclosure of community right-to-know information to the public, including advance notice, which we strongly support.

The bill goes a long way to address the issue of how to disclose trade secret information in cases of emergency or health needs, including easing of the "gag rule" on physicians. We would encourage amendments to this bill to further strengthen these disclosure provisions. For instance, local emergency response agencies may need instant access to this information, particularly for hazardous materials including toxic chemicals. In addition, confidential status of wells should not interfere with disclosure needed for protection of public health and safety and the environment.

Sincerely,

Jennifer A. Waggoner  
 President

cc: Members, Committee on Natural Resources and Water

1107 9<sup>th</sup> Street  
 Suite 300  
 Sacramento, CA  
 95814-3608

916 442.7215  
 888 870.8683  
 916 442.7362 fax

lwvc@lwvc.org  
 www.lwvc.org  
 www.smartvoter.org  
 www.easyvoter.org



April 3, 2013

The Honorable Fran Pavley, Chair  
Senate Natural Resources and Water Committee  
State Capitol, Room 4035  
Sacramento, CA 95814

Re: SB 4 (Pavley) Oil and gas: hydraulic fracturing  
Position: Support  
Scheduled for hearing: April 9, 2013

Dear Senator Pavley:

On behalf of the Los Angeles Community College District, I am writing in support of your SB 4. The bill would require the Secretary of the Natural Resources Agency to cause to be conducted an independent scientific study on hydraulic fracturing treatments. The bill would also require the Division of Oils, Gas, and Geothermal Resources in the Department of Conservation to adopt rules and regulations specific to hydraulic fracturing. The bill would also institute a fracking permitting system with pre- and post-fracking disclosure necessary to assess the frack job. The bill also specifies that no permits can be issued until the study is completed. The bill also requires advanced public notice to specified property owners at least 30 days prior to commencing a hydraulic fracturing treatment.

Currently and over the next several years, it is projected that hundreds of new oils wells will be drilled in the Inglewood Oil Field located in a heavily populated urban area immediately adjacent to West Los Angeles College. There is not available data on how much of the oil drilling involves fracking and the district is concerned about the impact that fracking might have on the campus community. There are well-documented hazards and risks to public, occupational and environmental health and safety associated with the practice of fracking. These include air and water contamination associated with poor handling practices, spills and wee-casing failures. The fracking of oil and gas is an industrial project that includes heavy equipment, chemicals and significant amounts of noise and dust. Neighbors of wells and potential wells ought to be provided advanced notice of and protection from these activities. In California there is little information about fracking and no state regulator can provide accurate and comprehensive information about the extent of fracking or an assessment of its risks. LACCD believes that SB 4 is a positive step in ensuring that communities are aware and protected from any potential risks associated with fracking. Thank you for introducing this important piece of legislation.

Sincerely,

Mark MacDonald

Cc: Members, Senate Natural Resources and Water Committee



NATURAL RESOURCES DEFENSE COUNCIL

April 2, 2013

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

**Re: SB 4 (Pavley) Hydraulic Fracturing – SUPPORT**

Dear Senator Pavley:

On behalf of NRDC (Natural Resources Defense Council), which has more than 1.3 million members and activists, 250,000 of whom are Californians, we write to support committee approval of your bill, SB 4. This important bill addresses the environmental issues inherent in the practice of hydraulic fracturing or “fracking.” SB 4 would provide a comprehensive framework for fracking regulation in California, which is long overdue.

NRDC is working in California and other parts of the country to prevent environmental damage from hydraulic fracturing, a well stimulation technique in which water, often sand, and a mix of chemicals are injected into a well at high pressure to fracture the underground formation and force oil and gas to the surface. Fracking uses immense quantities of water and has been linked to groundwater and air pollution, as well as earthquakes.

At present, California has no regulations specific to fracking. The state’s oil and gas regulatory agency, the Division of Oil, Gas and Geothermal Resources (DOGGR), does not know where fracking takes place, how much water is used by each frack job, what chemicals are in the fracking fluid and in what concentrations, or what environmental, health, and seismic impacts are resulting from fracking operations within the state. This troubling situation is exacerbated by the oil industry’s likely exploitation over the next few years of a massive geologic formation in central California known as the Monterey Shale, which reportedly contains up to 15 billion barrels of potentially recoverable oil. Industry will likely need to employ fracking and other advanced recovery techniques to extract that oil.

SB 4 will require, among other things, an independent scientific study on fracking, the adoption of comprehensive fracking regulations by DOGGR, and formal agreements

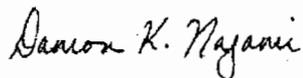
Senator Fran Pavley  
April 2, 2013  
Page 2 of 2

between DOGGR and other agencies to ensure regulatory accountability. Moreover, SB 4 will require well operators for the first time to obtain a permit from DOGGR specifically for fracking, and will prevent DOGGR from issuing any fracking permits after a certain date until the fracking study is complete. These provisions and others in the bill will go a long way toward filling the many regulatory gaps that presently exist regarding fracking activities in California.

We would like to continue working with you to improve the bill by ensuring that no permits for fracking are issued until the independent study is complete and adequate safeguards are in place to protect public health and natural resources. The bill should also require full disclosure of the chemicals used in fracking to ensure that Californians are protected from any adverse impacts.

We look forward to collaborating with you and this Committee to craft a final bill that will ensure a fully effective system of safeguards for hydraulic fracturing in California. Thank you for your continued leadership on this important issue.

Very truly yours,



Damon Nagami  
Senior Attorney



Victoria Rome  
California Legislative Director



# PawPAC

California's Political Action Committee for Animals

PO Box 20425, El Sobrante, CA 94820. 510/222-2236

www.pawpac.org info@pawpac.org

1.7.13

To: Senator Fran Pavley  
Re: SB4 Fracturing

Please list Paw PAC in  
support of SB4.

Thank you for introducing it.

Suzanna Handley  
President



April 18, 2013

The Honorable Jerry Hill  
Chair, Senate Environmental Quality Committee  
State Capitol, Room 2205  
Sacramento, CA 95814

RE: Support for SB 4 (Pavley) – fracking regulatory framework

Dear Chairman Hill,

There are well-documented hazards and risks to public, occupational and environmental health and safety associated with the practice of hydraulic fracturing (or “fracking”) of wells both across the country and throughout the world. These include air and water contamination associated with poor handling practices, spills and well and well-casing failures, as well as induced seismicity associated with disposal of waste fluids in injection wells, illegal dumping of the fluid wastes and accelerated roadway deterioration, among others. The fracking of oil and gas wells is essentially an industrial project – including heavy equipment, chemicals and significant amounts of noise and dust – and it makes no sense that the neighbors of the wells are not provided advance notice of and protection from these activities – as they are in other states. Here in California, existing and planned state regulation is completely inadequate. To this day – despite years of public outcry – no state regulator can provide accurate and comprehensive information about the extent of fracking or an assessment of its risks. This lack of progress, despite existing authority, is inexcusable.

One of San Fernando Valley Young Democrats’ goals as an organization is to increase the efficiency of our government. We are supporting SB 4 because it gives the state tools necessary to provide a transparent process for conducting fracking, thereby ensuring that the health and safety of the public, and the environment is not jeopardized.

Senator Pavley’s SB 4 is a straight-forward and common sense bill that seeks to provide explicit direction to state-level regulators on fracking in order to provide public transparency and regulatory accountability. It requires that an independent, peer-reviewed scientific study that includes public health be conducted and institutes a fracking permitting system with pre- and post-fracking disclosure – including chemical information – necessary to assess the frack job. Importantly, no permits can be issued until the study is completed and the health and safety of Californians and their environment is protected. The bill also includes advance public and neighbor notice of fracking, baseline and follow-up ground- and surface water testing and other provisions.

California lags the many states that already have similar law and regulations in place. I urge you to join us in supporting SB 4.

Sincerely,

Dina Cervantes  
President, San Fernando Valley Young Democrats

## Jennifer Mellon

---

**From:** Moore, Katharine <Katharine.Moore@sen.ca.gov>  
**Sent:** Wednesday, May 22, 2013 3:03 PM  
**To:** Jennifer Mellon  
**Cc:** Lakin, Marie  
**Subject:** RE: SB 4

SCAQMD letter update – SCAQMD has moved to an unqualified support position on SB 4.

**From:** Jennifer Mellon [<mailto:jmellon@ci.moorpark.ca.us>]  
**Sent:** Tuesday, May 21, 2013 9:17 AM  
**To:** Lakin, Marie; Moore, Katharine  
**Subject:** SB 4

Hi Marie and Katharine,

I left you a voicemail but figured I would follow up with an email as well. I am working on an agenda report regarding support for SB 4. One of our Council Members wished to review the Support and Opposition documents that are referenced on your fact sheet. Is there a way you can provide me with copies of the letters you have received?

Thank you very much,

Jennifer

*Jennifer Mellon*

Administrative Services Manager

Communications, Information Systems, Public Information, Intergovernmental Relations, Legislation

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# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

*Office of the Executive Officer*  
*Barry R. Wallerstein, D.Env.*  
909.396.2100, fax 909.396.3340

January 18, 2013

The Honorable Fran Pavley  
Senator, California State Senate  
State Capitol, Room 4035  
Sacramento, California 95814

Re: SB 4 – SUPPORT WITH AMENDMENTS

Dear Senator Pavley:

The South Coast Air Quality Management District's (SCAQMD) Legislative Committee is pleased to offer an interim position of SUPPORT WITH AMENDMENTS for SB 4 Oil and gas: hydraulic fracturing, as introduced on December 3, 2012. This position is considered interim until the SCAQMD Governing Board finalizes the position on this bill at its February meeting.

SB 4 is a comprehensive hydraulic fracturing (fracking) bill directing the Division of Oil, Gas, and Geothermal Resources (DOGGR) to promulgate regulations in consultation with other regulatory agencies that may have jurisdiction over different parts of the fracking process. It provides a statutory framework for how fracking – including the disclosure of fracking fluid composition – should become part of the existing well history and requires advanced notice to the public and specified agencies.

The U.S. EPA reports air quality impacts in areas with active natural gas development have increased emissions of volatile organic compounds (VOCs), hazardous air pollutants, and methane, the main component of natural gas and a potent contributor to climate change. Similarly, a recent study by the Colorado School of Public Health indicated that air pollution may contribute to "acute and chronic health problems for those living near natural gas drilling sites."

This bill's requirements to make the information regarding hydraulic fracturing in the exploration and production of oil and gas resources in California, and the specific chemicals used in the process, accessible to the public would be consistent with the goals and priorities of SCAQMD. This would allow the public and the SCAQMD to

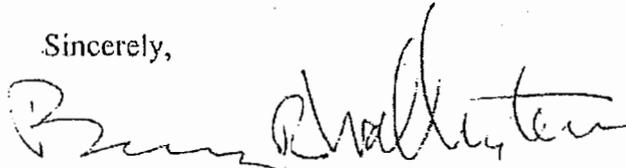
be better equipped to combat the emissions that these wells produce within the South Coast region.

Consistent with the intent of the bill and local air district responsibilities, SCAQMD recommends that the bill be amended to:

1. Require consultation with the local air districts during the rulemaking process.
2. Allow DOGGR to release trade secret information to air district employees in connection with their duties.
3. Require disclosure of fracturing fluid composition (including trade secrets) from out-of-state suppliers and in-state suppliers who are outside of our jurisdiction.

If you have any questions or would like to discuss the bill further, please call me at (909) 396-2100, or Lisha Smith, Deputy Executive Officer for Legislative & Public Affairs at (909) 396-3242.

Sincerely,



Barry R. Wallerstein, D.Env.  
Executive Officer

BRW:DJA:GSA



Western States Petroleum Association

April 2, 2013

The Honorable Fran Pavley  
California State Senate  
State Capitol, Room 4035  
Sacramento, CA 95814

**SUBJECT: SB 4 (PAVLEY) OIL AND GAS: HYDRAULIC FRACTURING  
AS AMENDED – MARCH 11, 2013  
OPPOSE**

Dear Senator Pavley:

The California Chamber of Commerce (Cal Chamber) and the undersigned organizations respectfully **OPPOSE** your **SB 4 (Pavley)**, which mandates the state's Natural Resources Agency to conduct a study of hydraulic fracturing, and then mandates regulation of that practice, inappropriately presuming the outcome of that study before it has even been conducted. Further, **SB 4** imposes a moratorium on the use of hydraulic fracturing in oil and gas production starting on January 1, 2015, until those regulations are complete. This would unnecessarily and substantially threaten our supplies of oil and natural gas, raising business costs and harming California's economy.

The provisions in **SB 4** are premature and would circumvent the Governor's regulatory efforts on hydraulic fracturing. We believe the Governor is committed to creating a regulatory structure that is based on science, technology, and data and through this process, where all stakeholders will have a strong voice, will be a comprehensive regulatory structure that will provide strong health and safety and environmental protections.

Economic recovery and growth require adequate supplies of reliable, affordable energy. By obstructing an important means of growing our in-state production capability, **SB 4** will necessitate increased oil imports, raising the cost not only of fuel, but of manufacturing, agricultural operations, public transportation and all goods and services which are energy-dependent. This will in turn place our businesses at a competitive disadvantage, impede job growth and suppress property, income and excise tax revenues.

This significant, untimely burden on California's businesses and economy is unnecessary. Oil and gas production as a whole is heavily regulated and monitored, and hydraulic fracturing has

been used here for decades with no reported incidents of harm to the environment or public health. **SB 4** will not provide added public health or environmental protections, but it will increase business costs, hamper California's economic recovery and deprive our state of much-needed fuel, jobs and tax revenues indefinitely.

For these reasons we **OPPOSE** your **SB 4 (Pavley)**.

Sincerely,

American Chemistry Council  
California Chamber of Commerce  
California Manufacturers and Technology Association  
California Business Properties Association  
Western States Petroleum Association



*California Independent Petroleum Association  
Blair Knox, Director of Public Affairs  
1001 K Street, Sixth Floor  
Sacramento, CA 95814  
Phone: (916) 447-1177  
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April 1, 2013

The Honorable Fran Pavley  
State Capitol, Room 4035  
Sacramento, CA 95814

*RE: SB 4-- Oppose*

Dear Senator Pavley:

On behalf of the California Independent Petroleum Association (CIPA), I am writing to inform you of our opposition to SB 4, relative to the development of an independent, scientific hydraulic fracturing study and disclosure of specific information.

Hydraulic fracturing is a well understood completion technique that has been used successfully in California for over half a century.

The California Division of Oil, Gas and Geothermal Resources (DOGGR) has regulated wells that are hydraulically fractured through well integrity regulations that protect freshwater sources with multiple layers of pipe and cement so there is no contamination of underground aquifers. This has worked well and there has been no instance of hydraulic fracturing contaminating aquifers from poor well construction in California.

The bill calls for a moratorium on hydraulic fracturing if a study is not complete by January 1, 2015. If not complete, then no new permits will be issued for hydraulic fracturing. Hydraulic fracturing is already one of the most studied commercial practices in the world. Dozens and dozens of studies have already been completed and peer reviewed including a 250 page study of hydraulic fracturing in the Baldwin Hills oil field in Los Angeles. The study was completed as part of a legal settlement between the field operator, City of Culver City, NRDC, Mark Salkin, Concerned Citizens for South Central Los Angeles, Community Health Councils and Citizens Coalition for a Safe Community. The study was completed by an independent firm with specific criteria and peer reviewed. Fourteen distinct environmental issues were studied. No significant impacts were found to groundwater, well integrity, methane emissions, seismic activity, subsidence, noise, vibrations, criteria pollutants and community health risks. The inadequacy of this or the other numerous studies which found the practice safe has never been presented.

Over 90% of hydraulic fracturing happens within Kern County, 80% within the Belridge oil field alone. Located on the west side of Kern County these fields have no potable water, no surrounding population and no other significant business interests. Even the unfounded risks claimed by opponents of the practice do not exist in over 80% of hydraulic fracturing operations.

CIPA supports the Governor's call for additional regulations developed specifically for hydraulic fracturing by the Department of Conservation and Division of Oil, Gas and Geothermal Resources.

These rules include the development of additional notification and well testing to insure the safety of this well-known well completion practice. CIPA supports the disclosure of chemicals used to the appropriate health and safety regulatory agencies while protecting proprietary information under the Uniform Trade Secret Act.

The call for a study is a strategy that we have seen used in other parts of the country to delay and even prohibit drilling operations. New York has been working on the same study for over four years with no end in sight. The strategy of death by bureaucracy is one of the reasons California is seen as unfriendly to business and is bad public policy.

Thank you for your consideration and the opportunity to comment on this important matter. Please feel free to contact me if you have any questions.

Sincerely,



Blair Knox

Director of Public Affairs

April 27, 2013

Senator Jerry Hill  
Chair  
Senate Committee for Environmental Quality  
Address: State Capitol, Room 2205  
Sacramento, CA 95814  
Fax: (916) 322-3519

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RE: Opposition to Senate Bill 4

Dear Senate Committee for Environmental Quality

My office represent Citizens Coalition for a Safe Community (CCSC), a 501(c)(3) non-profit organization originally formed to inform and protect the communities of Los Angeles County, concerned now about the impacts of oil field operations throughout California. It is with great disappointment that we must oppose SB4 (Pavley). We have great respect for Senator Pavley. Unfortunately, SB4 has many of the same problems and inadequate protections as the draft regulations from DOGGR and will continue the lack of transparency and oversight that has plagued oil field operations in the past.

Our largest concern is that the Legislature appears to be working in a vacuum of information and scientific study. While SB4 requires a study to be prepared in short order, SB4 also permits fracking to continue in the mean time. Even more concerning is that actual policy is being solidified in SB4 prior to considering the study. CCSC strongly supports a moratorium until a full study is prepared. Once a full study is prepared and all the policy issues have been resolved, then SB4 can be properly considered.

**A. Fracking and Oil Development Has Proven Unsafe to Health and the Environment.**

Fracking, acidization (acid fracking) and other "well stimulation" and injection operations have already been proven to cause substantial problems outside of California. For example, the Pennsylvania Department of Environmental Protection cited Cabot Oil and Gas for contaminating water resources in Dimock, Pennsylvania.<sup>i</sup> In Pavillion, Wyoming, a chemical known as 2-BE was discovered in water wells near fracking operations, a chemical commonly used in fracking mixtures.<sup>ii</sup> Texas regulators have found high levels of benzene in the air near fracked wells in the Barnett Shale wells.<sup>iii</sup> In Ohio, regulators acting on information from a whistle blower, found a fracking operator disposing of frack water into a storm drain that lead directly to a

claims of the operational safety should be viewed with a healthy level of skepticism, and a high level of disclosure and verification.

### **B. Limits on Water Usage Should Be Imposed on Fracking Operations**

We caution legislators about the snake oil sold by WSPA and other industry lobbyists about the difference between fracking in California and fracking outside of California. Fracking is fracking is fracking. And fracking is forever. While we agree that techniques vary from oil field to oil field and often within an oil field, the same environmental challenges occur regardless of location.

One of the main myths about California fracking perpetrated by oil industry lobbyists is that fracking in California uses significantly less water than operations in other states. Logically, such a claim, does not hold water (pun intended). Water usage in fracking operations is generally a component of the length of well bore. The deeper the well, the longer the well bore and multiple stages, the more water required. With directional (horizontal) drilling, the length of the well bore may be considerable.<sup>ix</sup>

More importantly, the low water usage claim is presented to avoid a very important policy issue for California - - should farmers and residents of California pay significantly higher water prices for the benefit of oil development? **If there are no prohibitions in the legislation on the amount of water that may be used in fracking, then fracking may use an unlimited amount of water in the near future!**

Already there are stories about farmers who cannot purchase water because oil companies are outbidding them for water resources.<sup>x</sup> Allowing the use of freshwater for fracking purposes to remain unregulated has the very real possibility of driving up already high water prices. Thus, while oil operators generate billions in profits from increased oil and gas extraction, Californians are burdened with higher water prices and food prices. Thus fracking essentially transfers wealth from water ratepayers to oil companies. There is no mechanism to compensate for the higher water prices that 37 million people in California will suffer due to increased competition for scarce water resources.

There are two main ways to address such issue. First, is to set some kind of limit on the amount of fresh water that may be used in fracking operations. Setting a reasonable limit per well or a state-wide limit on the use of water will ensure that water is available for higher priority uses, such as agricultural and residential customers.

Another way to address the issue is to simply mandate the use of recycled or brackish water. Recently, a bill was introduced in the Texas legislature to address this issue. (Texas HB2992) It states:

Natural Resources Code, Sec.A91.1017.SOURCES OF WATER USED TO PERFORM HYDRAULIC FRACTURING TREATMENTS.

(a) At least 50 percent of the total volume of water used to perform a hydraulic fracturing treatment on an oil or gas well must consist of:

- (1) brackish water;
- (2) recycled hydraulic fracturing wastewater;
- (3) industrial wastewater; or
- (4) a combination of the sources of water described by Subdivisions (1), (2), and (3).

(b) An operator shall report to the commission with regard to each oil or gas well operated by the operator on which a hydraulic fracturing treatment is performed:

- (1) the sources of water used to perform the treatment; and
- (2) the amount of water from each source used to perform the treatment.

(c) The commission may adopt rules to implement this section. Rules adopted under this section may provide exemptions from the requirements of this section in cases in which compliance with those requirements is impractical.

If Texas is concerned about water resources to such an extent that it would consider mandatory use of recycled water in fracking operations, then California should follow suit. Don't avoid the issue just because WSPA claims that fracking is different in California. Ensure that our precious water supplies are protected.

**C. Numerous Changes are Needed to SB4 to Ensure Public Participation and Safety in Fracking Operations.**

CCSC believes that SB 4 contains many of the same infirmities as the draft DOGGR regulations, which we consider extremely weak and inadequate. SB4 suffers from the following problems:

1. Removes fracking from the Underground Injection Control Program by defining fracking as well stimulation instead of underground injection. (PRC 3152.) Unless fracking with diesel fuels is prohibited or covered under a separate regulatory scheme, the legislation will result in the inability of California to maintain its certification of the UIC program under the Safe Drinking Water Act and EPA regulations. (See *L.E.A.F. v. EPA* (1997) 118 F.3d 1467 (Leaf I); *L.E.A.F. v. EPA* (2001) 276 F.3d 1253 (Leaf II).) There is nothing that prevents California from regulating fracking under the UIC program.

2. The definition of Hydraulic Fracturing is so narrowly focused that it leaves out fracking techniques that do not use proppants, such as acid fracturing, that can be equally harmful. (PRC 3152) We suggest removing the term "proppant" from the definition.

3. No public notice procedure or public participation prior to the issuance of the permit. (PRC 3160(d)(2)(A).)

4. Only after the fact notification of the approval of a permit to other agencies and the public. (PRC 3160(d)(4).)

5. Weak and unenforceable standard for approval of permit. Fracking shall be approved unless the operation "presents an unreasonable risk." (PRC 3160(d)(2)(C).) Such standard requires approval as long as the Supervisor considers the risk to public health "reasonable".

6. No opportunity for adjacent landowner to challenge or object to the permit prior to issuance. Only after-the-fact notification. (PRC 3160(d)(5).)

7. Trade secret protection would make it difficult to conduct water testing, establish undeniable links between fracking and health issues, conduct epidemiological studies, and may prevent wildlife resource managers from determining the source of environmental damage. (PRC 3160(j) et. seq.)

8. Actual gag order on physicians. (PRC 3160(j)(9)(B).)
9. Confidential well protections that can potentially keep secret the fact that fracturing is even occurring. (PRC 3160(l).)
10. Only provides 3 day notice to the DOGGR prior to actual commencement of fracking operations, making direct supervision of the fracturing operations by regulators unlikely. (PRC 3160(d)(9).) No notification to adjacent landowners.
11. Includes sections that are of ambiguous and of unknown legal affect. For example, states that the "operator is responsible for compliance with this section". It is unclear whether the term "section" applies to all of PRC 3160 or something else. It could be interpreted as providing a safe harbor provision to the suppliers or even DOGGR itself for failing to comply with duties enumerated under PRC 3160.

**D. SB4 Includes Some Very Important Public Protections that Should be Included in All Regulations of Fracking.**

Despite the numerous problems with SB4 that prevent CCSC's support for the bill, there are some positive components of the bill that we believe should be included in any future legislation. These include the following:

1. Requires the disclosure of the source of the water, which may be important to establish a need for further legislation. (See Section B, above.)
2. Disclosure of the disposal of water.
3. May permit a surface owner to demand pre-fracking water testing.
4. Provides discretion to the Supervisor to reject a permit if the requested fracking operation is in a location that is in an unsafe location (ie. near urban centers, earthquake faults, water bodies, or sensitive habitat.)
5. Requires the supplier to provide the actual chemical constituents in fracturing fluid to DOGGR, so that if "LOVE CANAL" starts

occurring, injured parties can at least blame the regulators for not protecting public health..

6. Shifts the burden to the supplier to protect its trade secrets in response to a public records act request.

7. The regulation could easily cover other types of well stimulation if the term "and proppant" is removed from definition or changed to "and/or proppant" was inserted into section 3152.

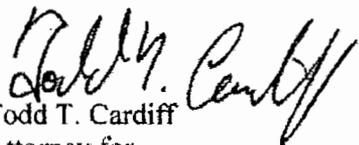
8. Institutes a moratorium if regulations are not implemented by January 1, 2015.

**E. CONCLUSION – SB4 Needs Substantially More Work.**

Unfortunately, because of the numerous problems with SB4, CCSC feels compelled to oppose such bill. Not only is fracking a huge potential threat to the environment, it has substantial policy implications with regarding to water use and climate change. Fracking needs thorough study prior to the setting up of any type of regulatory scheme. Creating policy without the science support is foolhardy at best. Science must drive policy considerations.

Finally, CCSC is absolutely offended by the trade secret protection and gag order on physicians. Such gag order can chill scientific research, prevent identification of disease or illness clusters that indicate water or air contamination and may result in the avoidance of liability by negligent and reckless oil operators. California needs a regulatory system for fracking that includes public participation and oversight.

Sincerely,

  
Todd T. Cardiff  
Attorney for  
Citizens Coalition for a Safe Community

<sup>i</sup> House Committee on Energy and Commerce, Minority Staff Report, "Chemicals Used in Hydraulic Fracturing" (April 2011) at p. 3, fn. 4 (citing "Officials in Three States Pin Water Woes on Gas Drilling" ProPublica (Apr. 2009) [www.propublica.org/article/officials-in-three-states-pin-water-woes-on-gas-drilling-426](http://www.propublica.org/article/officials-in-three-states-pin-water-woes-on-gas-drilling-426))

<sup>ii</sup> "Chemicals Used in Hydraulic Fracturing", *supra.* at p. 7.

<sup>iii</sup> House Committee on Energy and Commerce, "Memorandum re: Examining the Potential Impact of Hydraulic Fracturing" (Feb. 18, 2010) at p. 6.

<sup>iv</sup> USA v. Ben Lupo, Case No. 4:14 M 6006 (U.S. Dist. Ct. Northern Ohio).

<sup>v</sup> See, Watson TL, Bachu S. Evaluation of the Potential for Gas and CO<sub>2</sub> Leakage Along Wellbores. SPE 106817 (2009); Brufatto C, Cochran J, Power LCD, El-Zeghary SZAA, Fraboulet B, Griffin T, Munk S, Justus F, Levine J, Montgomery C, Murphy D, Pfeiffer J, Pompoich T, Rishmani L. From Mud to Cement-Building Gas Wells, *Schlumberger OilField Review*, (Autumn, 2003).

<sup>vi</sup> NOAA, Office of Response and Restoration, Final Report (Sep 2004), Incident News: <http://www.incidentnews.gov/entry/508292>.

<sup>vii</sup> California Planning and Development Report, "Unocal Reaches Deal on Avila Beach" <http://www.cp-dr.com/node/1312> (last accessed 1/16/2013); LA Times, "Avila Beach Prepares for Oil Cleanup" (Nov. 2, 1998), <http://articles.latimes.com/1998/nov/02/news/mn-38554> (last accessed 1/16/2013.)

<sup>viii</sup> Bakersfieldnow.com, "More problems in oil field where worker died in sinkhole" (August 21, 2011), <http://www.bakersfieldnow.com/news/local/127624563.html> (last accessed 1/16/2013.)

<sup>ix</sup> Western Organization of Resources Councils, "Gone for Good: Fracking and Water Loss in the West" (2013), available at [www.worc.org](http://www.worc.org)

<sup>x</sup> Bruce Finely, "Fracking Bidders Top Farmers at Water Auction", [Denverpost.com](http://www.denverpost.com/entertainmentcolumnists/cj_20306480/fracking-bidders-top-farmers-at-water-auction) (April 2, 2012) available at [http://www.denverpost.com/entertainmentcolumnists/cj\\_20306480/fracking-bidders-top-farmers-at-water-auction](http://www.denverpost.com/entertainmentcolumnists/cj_20306480/fracking-bidders-top-farmers-at-water-auction).

*The physician and health advocate voice for a world free from nuclear threats  
and a safe, healthy environment for all communities.*



April 3, 2013

Senator Fran Pavley  
State Capitol, Room 4035  
Sacramento, CA 95814

Physicians for Social Responsibility  
Los Angeles

**Re: SB 4 - Oppose unless amended**

Dear Senator Pavley:

With the deepest respect for you and your leadership on critically important issues facing California, we write to oppose Senate Bill 4 unless amended.

We do not take this position lightly and without great internal reflection on the gravity of our decision given that there is much that is praiseworthy in the bill. We determined, however, that we cannot and will not support a legislative effort that extends trade secret protection to the oil and gas industry for the chemical additives used in hydraulic fracturing in California. There is simply too much at stake.

Before we detail our opposition to the trade secrets language included in this bill, we first wish to commend your overall effort to clarify many of the conditions under which hydraulic fracturing may occur in California. We believe strongly, however, that the People of California have not yet been asked—nor have we answered—the threshold question: should oil and gas be extracted from California's shale using a range of unconventional methods, including hydraulic fracturing? It is clear based upon the experiences from other states that have answered this question for themselves in the affirmative, that such extraction can and does cause significant health and environmental harm. Indeed, it is because of these experiences that you—a long-time environmental leader—have authored this important bill. We believe that the experiences to date, and the data that have been collected thus far, clearly establish the need for California to engage in more thoughtful consideration of the threshold question of *whether* to extract oil and gas from shale before answering the question of *how* to extract oil and gas from shale. Until both those questions are answered, a moratorium is the most appropriate course of action.

As you are well aware, there are three other bills that take up the issue of a moratorium, so we focus here on the language included in—instead of that excluded from—SB 4. In particular, the bill states on page 12 at lines 31-35:

(j)(1) The supplier may claim trade secret protection for the chemical composition of additives pursuant to Section 1060 of the Evidence Code, or the Uniform Trade Secrets Act (Title 5 (commencing with Section 3426) of Part 1 of Division 4 of the Civil Code).

With this language, this bill makes it the policy of the State of California to elevate the financial gain of select oil and gas industry players over the health and environment of the people of California. In particular, we are compelled to point out that it is well known that Halliburton pioneered the development of the fracking and is one of the leading fracking contractors in the world. (See Halliburton's website at [http://www.halliburton.com/public/projects/pubdata/hydraulic\\_fracturing/fracturing\\_101.html](http://www.halliburton.com/public/projects/pubdata/hydraulic_fracturing/fracturing_101.html))

Physicians for Social Responsibility-Los Angeles has a long and proud history of opposing industry efforts to expose the public to harmful chemicals and their efforts to limit public disclosure of harmful chemicals unleashed upon the public. For example, we are actively seeking to end the use of toxic flame retardants in furniture and worked hard to remove BPA and phthalates from children's products. We fought to remove toxic pesticides from schools and supported buffer zones for pesticide use in California agricultural communities. In addition, we have spoken out against the cumbersome impacts on health professionals treating pesticide related illnesses in clinical settings of trade secrets protections granted to pesticides. This is simply a continuation of that work.

Further, we note that the approach in this bill stands in stark contrast to that taken in Alaska where the Alaska Oil & Gas Conservation Commission (AOGCC) has proposed a fracking regulation that requires disclosure of "the amount and types(s) of material pumped during each treatment stage and the total amount and types of material pumped..." to the Commission, but does not grant trade secret protection to the oil and gas industry. (See <http://doa.alaska.gov/ogc/>) The oft repeated chant of oil and gas industry lobbyist to the contrary, the grant of trade secret protection for this clearly hazardous mix of chemicals is an imprudent and unnecessary step in the wrong direction that is not dictated by the existing body of trade secret law. Rather, this grant of trade secret protection should be seen as a policy decision based upon balancing the financial goals of the oil and gas industry with the public health and environmental goals of the people of California. We urge you to strike that balance in favor of the people and environment of California.

We urge you to consider carefully the attached letter from ten law professors with expertise in intellectual property and trade secrecy that makes several very clear and compelling points about trade secrets law. Indeed, as the law professors point out:

The fact that a firm's competitors might be interested in information does not insulate a firm from the implications of the activity that the information describes. Trade secret law does not and should not exempt a firm from participation in the larger legal system, including warning and harm prevention.

Finally, we completely reject idea that it is proper for the State of California to force doctors, nurses, first responders, and other health professionals to enter into a contract with oil and gas companies--or a multi-national corporation like Halliburton--in order to access information necessary to provide competent medical treatment to their patients as set out in the language on page 14 at lines 22-26:

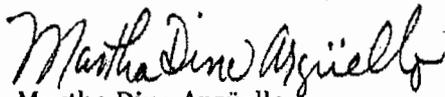
April 3, 2013

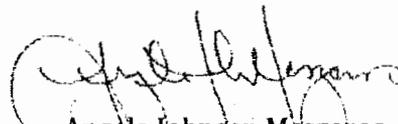
Confidentiality of the trade secret information shall be maintained. The holder of the trade secret may request a confidentiality agreement consistent with the requirements of this subdivision to whom this information is disclosed as soon as circumstances permit.

Everyone agrees that scientific information has a central place in the conversation about unconventional oil and gas extraction. In establishing practically insurmountable hurdles to collecting data about the chemical mixtures being used in hydraulic fracturing—the very foundation of scientific research and understanding about its impacts—California would be making a truly tragic decision that can only result in harm to the people of California.

Senator Pavley, we have long respected you and your work on behalf of the people of California. We look forward to working with you on the issues we discuss above so that we can proudly support your effort to develop comprehensive legislation on hydraulic fracturing.

Sincerely,

  
Martha Dina Argüello  
Executive Director

  
Angela Johnson Meszaros  
General Counsel

April 1, 2013

VIA EMAIL AND FACSIMILE

Commissioner Cathy P. Foerster  
Alaska Oil & Gas Conservation Commission  
333 West 7<sup>th</sup> Avenue  
Anchorage, Alaska 99501

Re: Second Revised Notice of Proposed Changes in the  
Regulations of the Alaska Oil and Gas Conservation  
Commission dated January 17, 2013, specifically 20 AAC  
25.283, Hydraulic Fracturing

Dear Commissioner Foerster:

We, the undersigned law professors who teach and write about intellectual property and trade secrets, write in support of the Alaska Oil and Gas Conservation Commission (AOGCC) proposed hydraulic fracturing regulations that would provide for the disclosure of information that might in other contexts be deemed trade secrets that cannot be disclosed to the public, under proposed regulation 20 ACC 25.283(h).

While businesses engaged in hydraulic fracturing may have legitimate trade secrets, the public's interest in assuring that hydraulic fracturing is managed in a manner that addresses all significant risks may legitimately outweigh commercial concerns. To impede debate and discussion of the use of public natural resources in the name of commercial secrecy is to put commercial interests above the prior and more general interest in careful stewardship of the environment. Put simply, some trade secrets must give way when broader public interests are at issue.

By writing in support of these regulations, the undersigned take no position on whether hydraulic fracturing should be conducted in the State of

Alaska or whether such activities actually pose any environmental, public health or safety risks. Rather, we write to note that trade secrecy claims should not impede consideration of important public concerns.<sup>1</sup>

We make three arguments in support of these regulations:

**First, it is a basic principle in a democracy that the public shall conduct informed debate and discussion of public matters.** To do this, there must be broad access to data about potential environmental, health and safety (EHS)

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<sup>1</sup> David S. Levine, *Secrecy and Accountability: Trade Secrets in Our Public Infrastructure*, 59 FL. L. REV. 135, 162 (2007) (conflict between the values of trade secrecy and accountability and transparency are traditionally present in public infrastructure development; “once there is a deviation from purely commercial concerns towards other goals for which trade secrecy was not designed, like the quasi-governmental activity of providing public infrastructure, the disconnect becomes severe;”) see also David S. Levine, *The People’s Trade Secrets?*, 18 MICH. TELECOMM. AND TECH. L. REV. 61, 84 (2012) (discussing government-created trade secrets, and noting that “[r]egardless of the theoretical rationale, the concept of a ‘government trade secret’ is an anomaly because its existence is not an incentive to encourage innovation (under the utilitarian theory) and has not been used as a weapon to prevent illegal misappropriation (as in a tort-based theory of trade secrecy). Instead, the government trade secret has a developing track record as a last-ditch basis to deny disclosure of information to the public. No proffered theory of trade secrecy, and especially no utilitarian construct, can justify or even explain such an application.”) For discussion of trade secrecy in the context of environmental management and further references, see Mary L. Lyndon, *Trade Secrets and Information Access in Environmental Law*, in THE LAW AND THEORY OF TRADE SECRECY,; A HANDBOOK OF CONTEMPORARY RESEARCH, Ed. Rochelle C. Dreyfuss and Katherine J. Strandburg (2011), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1947514](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1947514); *Secrecy and Access in an Innovation Intensive Economy: Reordering Information Privileges in Environmental, Health and Safety Law*, 78 UNIVERSITY OF COLORADO LAW REVIEW 465 (2007); *Secrecy and Innovation in Tort Law and Regulation*, 23 N.M. L. Rev. 1 (1993); *Information Economics and Chemical Toxicity: Designing Laws to Produce and Use Data*, 87 Mich. L. Rev. 1795 (1989). On the importance of public participation in environmental management see Mary Lyndon, *The Environment on the Internet: The Case of the BP Oil Spill*, 3 ELON L. REV. 211 (2012), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2188605](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2188605).

hazards, even when the disclosure of such information might pose some pecuniary risk to the firms that are introducing the possibility of EHS risks. Economic risks are inherent in market activity, but these cannot be reduced by increasing EHS risks to the public and the environment. Instead, environmental law mandates public engagement with regulation and participation in the management of environmental resources.<sup>2</sup> Moreover, the price of serving the public may be that some information that would otherwise be kept private must be made available because of the nature of the commercial activity.

**Second, effective environmental management requires broad disclosure of specific data that describes any discharges into the environment – including chemical identity, volume and locations of each chemical discharged – and data on health and ecological effects.** For example, although pollution may be abandoned by its commercial source, often the impact does not disappear. It may persist and be active; repeated releases of pollutants will generate wider distribution and more complex interactions.<sup>3</sup> Thus, the social costs of the original secret become greater with the passage of time, as the effect becomes more costly to identify and remedy.<sup>4</sup> Like pollution effects, scientific

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<sup>2</sup> Lyndon, *supra* note 1, *Secrecy and Access in an Innovation Intensive Economy and The Environment on the Internet*.

<sup>3</sup> See John S. Applegate, *The Temporal Dimension of Land Pollution: Another Perspective on Applying the Breaking the Logjam Principles to Waste Management*, 17 N.Y.U. ENVTL. L.J. 757(2008); Daniel A. Farber, *Probabilities Behaving Badly: Complexity Theory and Environmental Uncertainty*, 37 U.C. DAVIS L. REV. 145 (2003) (explaining that complex systems require careful monitoring and repeated interventions as they evolve).

<sup>4</sup> Scientific understanding of the health and environmental costs of pollutants may develop over decades. See Carl F. Cranor, *LEGALLY POISONED: HOW THE LAW PUTS US AT RISK FROM TOXICANTS* (Harvard University Press 2011); for a review of this book, see *The Toxicity of Low-Dose Chemical Exposures: A Status Report and a Proposal, Reviewing Carl Cranor, Legally Poisoned: How the Law Puts US*

knowledge also evolves over time. Thus, risk management is an iterative process and access to the entire stream of pollution information, not a peek or a snapshot, is needed. Trade secrecy would restrict full understanding of pollution events and their impacts.

Effective environmental management should strive for efficiency, but secrecy produces misallocations. Instead of allowing for full study of pollution's costs by all interested parties at the beginning of a project and of monitoring its costs over time, secrecy shifts costs to the public and to the future. Rather than fully valuing present resources, secrecy enables appropriation of environmental

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*at Risk from Toxicants*, 52 JURIMETRICS 457 (2012), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2226672](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2226672). Secrecy makes scientific research more difficult and more costly. See, e.g., Andrew Vickers, *Cancer Data? Sorry, Can't Have It*, N.Y. TIMES, Jan. 22, 2008, at F8; Barry Meier, *Contracts Keep Drug Research Out of Reach*, N.Y. TIMES, Nov. 29, 2004 (describing effects on data availability of contracts between drug companies and academic researchers); Sheila Jasanoff, *Transparency in Public Science: Purposes, Reasons, Limits*, 69 LAW & CONTEMP. PROBS. 21 (2006). Some key tools, such as mass balance accounting, have been blocked. Resistance to reporting the amounts of chemicals firms discharge has hindered assessment of environmental loading and ecosystem effects. Robert K. Klee, *Enabling Environmental Sustainability in the United States: The Case for a Comprehensive Material Flow Inventory*, 23 STAN. ENVTL. L.J. 131, 156 (2004) (arguing that material flow/mass balance information would enable transition to more efficient system).

Secrecy also can impose costs on individuals and put their health at risk. For instance, in 2009, Cathy Behr, a nurse in Colorado, fell seriously ill after treating a worker who had been injured in a chemical spill. Her doctors diagnosed chemical poisoning, but the manufacturer of the product she was exposed to would not disclose its full ingredients, because it considered them proprietary. Ms. Behr has partially recovered, but she continues to have respiratory problems. She has been left with uncertainty about her future health and an awareness of the limitations on her political options. "I'd really like to know what went wrong", Mr. Behr has said. "As citizens in a democracy, we ought to know what's happening around us." Lyndsey Layton, *Use of Potentially Harmful Chemicals Kept Secret Under Law*, WASH. POST, Jan. 4, 2010, at A1.

resources with limited accountability. To the extent that this distortion may be present in the relation of hydraulic fracturing to the water and wildlife resources it affects, the public should be allowed to fully assess its impact, if any.<sup>5</sup>

This is not an exceptional situation; indeed, communication obligations are pervasive in the common law and environmental statutes have built upon this foundation.<sup>6</sup> Both the common law and regulation affirm the importance of access to information about risks. For example, environmental impacts can follow predictably from a firm's decision to distribute pollution or product ingredients in circumstances that will lead to exposure. Exposure is expected, not a surprise. The choice to release pollutants triggers familiar obligations to communicate, even where there may be a commercial impact on the entity disclosing such information.

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<sup>5</sup> Water is valuable and not truly renewable or even substitutable in many ecosystems. Water use and supply are increasingly discussed in terms of shortages and many believe that globally and in particular regions, we are reaching "peak water." See Peter H. Gleick & Meena Palaniappan, *Peak Water Limits to Freshwater Withdrawal and Use*, 107 PROC. NAT'L ACAD. SCI. 11155 (June 22, 2010), available at <http://www.pnas.org/content/107/25/11155.full.pdf>.

<sup>6</sup> Risk communication is a strong requirement in tort law. For example, negligence law imposes a duty to act with reasonable care with respect to third parties. See RESTATEMENT (THIRD) OF TORTS: LIAB. PHYSICAL HARM § 7 (2005) (an actor ordinarily has a duty to exercise reasonable care when the actor's conduct creates a risk of physical harm). There is a duty to warn those who may be affected by one's actions. *Id.*, §18. Even if adequate warning is given, the defendant can fail to exercise reasonable care by failing to adopt further precautions to protect against the risk if it is foreseeable that despite the warning some risk of harm remains. *Id.* Warning obligations have been strengthened by case law and also retained as a strong requirement in the RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB. §§ 2(c), 10, 13, & 18 (1998). For discussion of the role of public and local participation in environmental regulation, see Lyndon, *supra*, note 1, *Secrecy and Access in an Innovation Intensive Economy*, at 509-515 and *The Environment on the Internet*, at 224-244.

Third, trade secrecy law should not be used as a means to impede public access to EHS information. Trade secrecy's essential functions are established: it serves the dual purposes of incentivizing creation of information by allowing commercial secrecy to be protected, and maintaining fair competition through punishment of misappropriation of information.<sup>7</sup> Thus, it supports incentives to innovate by facilitating data sharing in business relationships and providing control over secret, commercially-valuable information. These functions are not directly served by preventing the disclosure of EHS information necessary for informed debate of fundamental public concerns.

Indeed, trade secret law has little to say about matters outside of its own boundaries.<sup>8</sup> It was not designed to address questions about access to information for reasons other than commercial competition.<sup>9</sup> It says nothing about whether the public might have a general interest in information at all, much less for reasons of environmental, health or safety. Thus, the AOGCC's

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<sup>7</sup> *Supra* note 1; see also Sharon Sandeen & Elizabeth A. Rowe, CASES AND MATERIALS ON TRADE SECRET LAW 13-15 (West 2012).

<sup>8</sup> It is not clear that EHS data can be legitimately claimed as trade secret information. See Lyndon, *Trade Secrets and Information Access in Environmental Law*, *supra* note 1, discussing perverse effects of allowing trade secrecy to operate within EHS law. For instance, trade secret law is concerned with commercial relationships, not harm to individuals or to public resources; it would seem that discharge of pollutants abandons any secrecy claim that might otherwise attach. Where high-tech reverse engineering is available, "secret" data is more available to commercial rivals than to exposure victims. See Lyndon, *Secrecy and Innovation*, *supra* note 1 at 6-10.

<sup>9</sup> *Id.*; see also Levine, *Secrecy and Unaccountability*, *supra* note 1, at 150 ("courts, commentators, and authors of model codes and restatements have developed trade secrecy's parameters by conceptualizing the commercial actor in the business world competing with his rivals for commercially valuable information.")

proposed disclosure regulation, 20 AAC §25.283(h), adopts the correct stance: trade secrecy should not impede disclosure of information when the information describes public risks that the trade secret claimant is itself creating.<sup>10</sup>

Indeed, when trade secret interests conflict with other values, confidentiality interests have been compromised or overridden.<sup>11</sup> Here, a similar result should occur: the fact that a firm's competitors might be interested in information does not insulate a firm from the implications of the activity that the information describes. Trade secret law does not and should not exempt a firm from participation in the larger legal system, including warning and harm prevention.<sup>12</sup>

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<sup>10</sup> Trade secret proponents may claim that they are being deprived of "property," but even full-blown property rights do not legitimate harming third parties or avoiding duties. The literature on the "tragedy of the commons," the fundamental parable of environmental law, laments the barriers to collective action to manage common resources, but secrecy exacerbates this problem by blocking efficient or sustainable allocation of resources. It is, in effect, a claim to unregulated access to resources.

<sup>11</sup> For instance, trade secret law balances the rights of employers to control the use of information and employees' right to work and use their skills and knowledge. Steven Wilf, *Trade Secrets, Property, and Social Relations*, 34 CONN. L. REV. 787 (2002). Administrative agencies are poorly positioned to evaluate and monitor trade secrecy claims and this function is resource intensive. See Lyndon, *supra* note 1, *Secrecy and Access in an Innovation Intensive Economy*, at 502-503, 516-518, and *Secrecy and Innovation in Tort Law and Regulation* at 33-40.

<sup>12</sup> The Third Restatement of Unfair Competition states: "The disclosure of another's trade secret for purposes other than commercial exploitation may implicate the interest in freedom of expression or advance another significant public interest. ...[A] privilege is likely to be recognized ... in connection with the disclosure that is relevant to public health or safety, or to the commission of a crime or tort, or to other matters of substantial public concern." RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 40 cmt. c (1995) (discussing improper use of disclosure).

However, a trade secret exemption for EHS information would achieve that very outcome: it would shield the holders of this information from informed public scrutiny and examination. Instead of cooperating in the broader system that works to preserve scarce common resources, trade secrecy claimants like those engaging in hydraulic fracturing assert an entitlement to use of natural resources without accountability, perhaps to waste. The key word, however, is *perhaps*, because absent information, the AOGCC and public simply won't know.<sup>13</sup>

Thus, access to EHS information creates enormous public benefits while secrecy impedes efficiency by delaying accountability and response and obscuring risks that become more costly with time. These distortions are particularly significant in environmental risk management, where latent externalities are endemic.<sup>14</sup> Trade secrets must be made available to the AOGCC and the public so that these issues can be addressed.

### Conclusion

The AOGCC proposes a regulation that serves the broader public interest in informed decision-making. Trade secrecy should have a limited role in this realm. Instead, the AOGCC's access and disclosure rules should conform to principles of risk communication. Disclosure aligns social needs with market and innovation imperatives and facilitates public best practices in environmental

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<sup>13</sup> Indeed, this raises a point often ignored: by disclosing alleged trade secrets, the hydraulic fracturing industry may be able to assure the public that its activities pose no EHS risks. Absent such information, guesswork replaces actual informed decision-making, which serves no one's interests.

<sup>14</sup> While there could be some pecuniary harm to trade secret holders if such secrets were made public through a public records request, the gains associated with public disclosure of this information outweigh those potential losses. Moreover, patents can also serve as an imperfect but valuable substitute in many cases for trade secrecy protection.

risk management. Such should be the state of economic affairs and information flows in an enlightened, modern, technologically-advanced democracy.

For further information, questions or correspondence, please contact David S. Levine at [dlevine3@elon.edu](mailto:dlevine3@elon.edu) or Mary Lyndon at [lyndonm@stjohns.edu](mailto:lyndonm@stjohns.edu).

Respectfully submitted,<sup>15</sup>

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<sup>15</sup> Affiliations are listed for identification purposes only.



May 19, 2013

The Honorable Fran Pavley  
California Senate  
State Capitol  
Sacramento, CA 95814

**RE: SB 4 (Pavley) Fracking—Oppose**

Dear Senator Pavley:

As noted in our April letter, Sierra Club California shares your interest in ensuring that the state's environment and public health are protected from the effects of fracking. Our organization also shares your interests in full and comprehensive disclosure of fracking activities. We thank you for initiating leadership on the fracking issue with Senate Bill 4.

However, we continue to believe that two key elements in SB 4 require amending. We have discussed this with your staff at length and understand that you do not intend to amend at the moment the language concerning trade secrets in a way that would allow us to support the bill. Therefore, we are changing our position from one of support if amended to one of oppose.

Again, as we noted in our earlier letter, as the bill states in Section 1, there is too little known about the impacts of fracking on environmental, natural resources, occupational and public health. We agree that a thorough study, as described in the bill, is warranted. However, we do not believe that any fracking should proceed before that study is completed and a firm foundation and certainty that fracking will not create harm is established and can be effectively monitored. Therefore, we the bill should include a moratorium on new fracking until that study and certainty are established.

Also, we believe that the chemicals used in fracking should be disclosed and available to the public. We appreciate the sections of the bill that assure disclosure. However, the elements of the bill that allow suppliers of fracking fluid to make a trade secret/confidentiality claim can be used to undermine the disclosure protections. Therefore, we must oppose AB 4.

Sincerely,

Kathryn Phillips  
Director

To cense contact: www.mgmaker.com

# SWCLC

Southwest California  
Legislative Council

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May 20, 2013

**The Honorable Fran Pavley**  
California State Senate  
State Capitol, Room 4035  
Sacramento, CA 95814

**RE: SB 4 (PAVLEY) OIL AND GAS: HYDRAULIC FRACTURING**

**Position: OPPOSE**

The *Southwest California Legislative Council*, a coalition of the Temecula Valley, Murrieta, Wildomar and Lake Elsinore Valley Chambers of Commerce and the more than 2,500 businesses represent, respectfully **OPPOSE SB 4 (Pavley)**. As amended, **SB 4** mandates the state's Natural Resources Agency conduct a study of hydraulic fracturing, and then mandates regulation of that practice, inappropriately presuming the outcome of that study before it has even been conducted. Further, **SB 4** imposes a moratorium on the use of hydraulic fracturing in oil and gas production starting on January 1, 2015, until those regulations are complete. This would unnecessarily and substantially threaten our supplies of oil and natural gas, raising business costs and harming California's economy.

The provisions in **SB 4** are premature and would circumvent the Governor's regulatory efforts on hydraulic fracturing. We believe the Governor is committed to creating a regulatory structure that is based on science, technology, and data and through this process, where all stakeholders will have a strong voice, will be a comprehensive regulatory structure that will provide strong health and safety and environmental protections.

Economic recovery and growth require adequate supplies of reliable, affordable energy. By obstructing an important means of growing our in-state production capability, **SB 4** will necessitate increased oil imports, raising the cost not only of fuel, but of manufacturing, agricultural operations, public transportation and all goods and services which are energy-dependent. This will in turn place our businesses at a competitive disadvantage, impede job growth and suppress property, income and excise tax revenues.

This significant, untimely burden on California's businesses and economy is unnecessary. Oil and gas production as a whole is heavily regulated and monitored, and *hydraulic fracturing has been used here for decades with no reported incidents of harm to the environment or public health*. **SB 4** will not provide added public health or environmental protections, but it will increase business costs, hamper California's economic recovery and deprive our state of much-needed fuel, jobs and tax revenues indefinitely.

For these and other reasons, *The Southwest California Legislative Council* **OPPOSES SB 4 (Pavley)**, and ask that you vote "NO" when it comes before you for consideration.

Respectfully,



Dennis Frank, Chair  
[drfrankusc@earthlink.net](mailto:drfrankusc@earthlink.net)



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Cc:

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Senate Committee on Environmental Quality  
Senator Jerry Hill, Chair  
Senator Ted Gaines

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