



BOARD OF SUPERVISORS  
AGENDA LETTER

Agenda Number:

Clerk of the Board of Supervisors  
105 E. Anapamu Street, Suite 407  
Santa Barbara, CA 93101  
(805) 568-2240

Department Name: Planning and  
Development  
Department No.: 053  
For Agenda Of: September 20, 2011  
Placement: Departmental  
Estimated Tme: One hour  
Continued Item:  
If Yes, date from: Yes, 6-7-11 & 8-2-11  
Vote Required: Majority

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**TO:** Board of Supervisors

**FROM:** Department Director(s)  
Contact Info: Dr. Glenn Russell, Ph.D., 568-2085  
Doug Anthony, Deputy Director, 568-2046  
Rick Todd, Fire Marshall, 681-5554

**SUBJECT: Briefing on Hydraulic Fracturing**

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**County Counsel Concurrence**

As to form: Yes

**Other Concurrence:** N/A

As to form: No

**Recommended Actions:**

That the Board of Supervisors

- A) Receive and file a third briefing on hydraulic fracturing, and
- B) Direct staff to process an amendment to Section 35.52.050 to clarify the appropriate permit currently required for hydraulic fracturing as an Oil Drilling and Production Plan.

**Summary Text:**

This briefing follows two previous briefings on hydraulic fracturing. At its hearing of June 7, 2011, the Board of Supervisors received a briefing on hydraulic fracturing, and continued the item to August 2, 2011, when Ms. Miller, State Oil and Gas Supervisor, Division of Oil, Gas and Geothermal Resources would be available to answer questions. The Board also requested staff to return with the following information in relation to regulatory oversight of hydraulic fracturing:

- 1. Outcome of discussions with the oil industry to date regarding hydraulic fracturing
- 2. Discussion about a moratorium on hydraulic fracturing in Santa Barbara County
- 3. Assessment of the 30-day trigger for requiring a Business Plan

A brief update on hydraulic fracturing is also provided below.

### **Outcome of Discussions with the Oil Industry**

The Coastal Oil and Gas Operators' Group (COGOG) has met frequently to discuss local concerns about hydraulic fracturing, and the option of evaluating potential impacts of hydraulic fracturing via a programmatic environmental impact report (PEIR). COGOG comprises the majority of onshore oil and gas producers in Santa Barbara County. After significant consideration, COGOG has informed staff that there is no consensus among the producers to fund the County's preparation of a PEIR. Not all the COGOG participants have any plans to employ hydraulic fracturing in existing or future operations. Venoco, the company that applied hydraulic fracturing in two wells north of Los Alamos earlier this year, has since expressed disappointment in the results of its experience with six wells in California.<sup>1</sup> The company plans to re-focus on a less-expensive, vertical-well program with acid treatment instead of the more costly hydraulic fracturing.<sup>2</sup> Without sufficient interest in conducting hydraulic-fracturing operations countywide, COGOG will not move forward with a countywide PEIR.

That said, the U.S. Energy Information Administration, a branch of the Department of Energy, recently released a review of emerging hydrocarbon resources in the shale gas and shale oil plays of the nation's lower 48 states. This review identifies the Monterey/Santos play of southern California, specifically found in the Santa Maria and San Joaquin Basins, as the largest oil shale formation, with an estimated 15.4 billion barrels of technically recoverable reserves, or 64 percent of the nation's total estimated shale oil plays, excluding Alaska and Hawaii.<sup>3</sup> Staff anticipates the recent increase in oil production permit applications to continue into the foreseeable future.

Staff has informed the industry that current proposals to conduct hydraulic fracturing in existing or new wells will require Planning Commission approval of an Oil Drilling and Production Plan, and industry members have acknowledged this requirement. Such permits may be issued for one or more wells, or may be based on plans that cover an entire field. The plans would require environmental review, including disclosure of pertinent information, to assess potential impacts to public health and safety, and the environment. Staff expects continued discussions will occur with individual companies.

Meanwhile, staff recommends processing an amendment to the Land Use and Development Code to explicitly clarify that any hydraulic fracturing in existing or new wells requires the County Planning Commission's approval of an Oil Drilling and Production Plan. The code currently requires this discretionary permitting path for any oil and gas production activity that could result in a potentially significant impact to the environment; however, explicit identification of the permitting requirement for hydraulic fracturing would enhance the clarity of the code.

### **Moratorium on Hydraulic Fracturing**

The Board directed staff to address the feasibility of imposing a moratorium on hydraulic fracturing in Santa Barbara County. The County can adopt an urgency measure as an interim ordinance by a four-fifths vote of the Board pursuant to Government Code section 65858 to allow time to study or consider a contemplated general plan, specific plan, or zoning proposal. Such an ordinance may be effective up

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<sup>1</sup> "Venoco prefers Monterey vertical well economics," *Oil & Gas Journal*, August 4, 2011. Venoco Inc at EnerCom Incorporated The Oil & Gas Conference, August 15, 2011, webcast presentation by Chairman and CEO Tim Marquez.

"Venoco sued over CEO's offer," *Pacific Coast Business Times*, August 2, 2011, page 2.

<sup>2</sup> *Ibid.*

<sup>3</sup> U.S. Energy Information Administration, Department of Energy, *Review of Emerging Resources: U.S. Shale Gas and Shale Oil Plays*, July 2011, pages 4, 5 and 73. Note that the metric of technically recoverable reserves represents a higher estimate than the metric of economically recoverable reserves.

to 45 days, but may be extended up to a total of 2 years. Any extension of a moratorium also requires a four-fifths vote of the Board. To date, staff is aware of the following moratoria on hydraulic fracturing:

- In August, 2011, New Jersey's Governor Christie vetoed a bill that was passed by that state's legislature to ban hydraulic fracturing permanently; however, he then issued an executive order imposing a one-year moratorium on the practice while federal and state studies move forward. According to responses, there are no pending proposals to apply hydraulic fracturing in the state.
- The State of New York briefly applied a moratorium on hydraulic fracturing in December of 2010, but rescinded it in July of this year, following the release of a draft study by the state's Department of Environmental Conservation (summarized in staff's previous Board letter). Some municipalities in New York have adopted moratoria as well.
- In June of this year, Morgantown, a municipality in West Virginia, passed a ban on hydraulic fracturing in horizontally drilled wells within a mile of city limits. In August, the Circuit Court overturned the ban. The City has not decided whether or not to appeal the court's decision.
- On March 4, 2011, two producers in Arkansas agreed to temporarily cease the injection of fluids recovered from hydraulic fracturing into injection wells at the request of the Arkansas Oil and Gas Commission. The temporary cessation allows the officials to observe any relationship between the injection of fluids and the increased incidence in earthquakes – a dozen of which were greater than 3.0 in magnitude and one reaching 4.7.
- France banned hydraulic fracturing on July 1 of this year.

Staff is not recommending a moratorium at this time for the following reasons. First, the County is not embarking upon a course to study hydraulic fracturing for purpose of adopting regulations. Instead, the County has stated that an application of hydraulic fracturing requires an Oil Drilling and Production Plan, subject to full review and disclosure under the California Environmental Quality Act and approval by the Planning Commission in a duly noticed public hearing. Second, there are no specific studies underway at the state or federal level that address the impacts of hydraulic fracturing in the Monterey shale, which would be the target formation for any hydraulic fracturing in the County.

### **Thirty-Day Trigger for Requiring A Business Plan**

As the Certified Unified Program Agency (CUPA) for Santa Barbara County, the Fire Department is charged with implementing Chapter 6.95, Hazardous Materials Release Response Plans and Inventory, of the California Health and Safety Code. The Fire Department is guided in the CUPA Program by State law and authorized by the State to conduct the six mandated CUPA programs within the County. Section 25501.2 of the California Health and Safety Code defines inventory requirements of the Business Plan as follows:

*For purposes of the inventory requirements of this chapter, "store," as used in subdivision (i) of Section 25501, does not include the storage of hazardous materials which are in transit or which are temporarily maintained in a fixed facility for a period of less than 30 days during the course of transportation.*

This section indicates that only those hazardous materials maintained temporarily in storage for less than 30 days during the course of transportation are subject to the 30-day trigger. Chemicals used in hydraulic fracturing are not in the course of transportation, but rather are used onsite prior to being disposed. The Fire Department's practice is to require submittal of Business Plans within 30 days of commencing storage onsite, and to require submittal of updated Business Plans within 30 days of adding

or eliminating storage of any chemicals listed in existing Business Plans. Staff also notes that disclosure of chemicals used onsite would need to occur as part of the environmental review of the project.

### **Brief Update on Hydraulic Fracturing**

- **Shale Gas Subcommittee of the Secretary of Energy Advisory Board**

The Shale Gas Subcommittee of the secretary of Energy Advisory Board has been charged with identifying mitigation to reduce impacts of hydraulic fracturing to public health and safety, and the environment. It recently released a ninety-day report with a list of findings and recommendations to address four areas of major concern: 1) possible pollution of drinking water from methane and chemicals used in hydraulic fracturing; 2) air pollution; 3) community disruption during shale gas production; and 4) cumulative effects on communities and ecosystems.<sup>4</sup> While focused on gas production, the Subcommittee's findings and recommendations, listed below, may have some relevancy for oil production:

- Improve public information
- Improve communication among state and federal regulators
- Improve air quality, including both criterion pollutants and greenhouse gases
- Protect water quality, including regulatory inspection during safety-critical stages of well construction and hydraulic fracturing, and background water quality measurements
- Disclose fracturing fluid composition
- Reduce use of diesel fuel
- Manage short-term and cumulative impacts on communities, land use, wildlife, and ecologies, including evaluation of water use at the scale of affected watersheds
- Organize for best practices, favoring a national approach with regional mechanisms that recognize differences in geology, land use, water resources, and regulation
- Conduct needed research and development by the federal government that keeps protections for public safety and the environment at pace with technological advancements in the industry

The Subcommittee notes that, while hydraulic fracturing has been conducted over many decades, it was only in 2002 and 2003 that the industry combined the technique of hydraulic fracturing with that of horizontal drilling. In this context, the subcommittee stated:

*The Subcommittee has been struck by the enormous difference in perception about the consequences of shale gas production. Advocates state that fracturing has been performed safely without significant incident for over 60 years, although modern shale gas fracturing of two mile long laterals has only been done for something less than a decade. Opponents point to failures and accidents and other environmental impacts, but these incidents are typically unrelated to hydraulic fracturing per se and sometimes lack supporting data about the relationship of shale gas development to incidence and consequences. An industry response that hydraulic fracturing has been performed safely for decades rather than engaging the range of issues concerning the public will not succeed.<sup>5</sup>*

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<sup>4</sup> <http://www.shalegas.energy.gov/index.html>.

<sup>5</sup> The SEAB Shale Gas Production Subcommittee Ninety-Day Report – August 11, 2011, page 13.

- Pending Legislation

State Assembly bill AB-591, introduced originally to require disclosure of chemicals used in the hydraulic fracturing process, has stalled in the Senate Appropriations Committee, reportedly due to controversy such as the reporting of chemicals, or fracking fluid formulas, that industry believes are trade secrets. The bill is not expected to be considered again until next January.

At the federal level, House of Representatives bill HR-1084 would require disclosure of chemicals used in hydraulic fracturing, both before and after hydraulic fracturing is conducted. This bill was referred to the House Committee on Energy and Commerce upon its introduction on March 15, 2011, and subsequently was referred to the Subcommittee on Environment and the Economy. Senate S-587, a companion bill to HR-1084, was referred to the Committee on Environment and Public Works after its introduction on March 15, 2011, and hearings were held in the Subcommittee on Water and Wildlife. No action on either bill is expected this year. Discussions about mandatory disclosure of hydraulic-fracturing chemicals are expected to continue next year in response to public concerns and as studies from Environmental Protection Agency and the Energy Department become available.

**Fiscal Analysis:**

Staff time to research and prepare this briefing is funded in the Administration Program of the Development Review Division, North found on page D-316 of the FY 11-12 budget book.