

The Florida Senate  
**BILL ANALYSIS AND FISCAL IMPACT STATEMENT**

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: The Professional Staff of the Committee on Community Affairs

BILL: CS/CS/SB 1028

INTRODUCER: Community Affairs Committee; Environmental Preservation and Conservation Committee; and Senator Clemens

SUBJECT: Fracturing Chemical Usage Disclosure Act

DATE: April 16, 2013 REVISED: \_\_\_\_\_

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Gudeman</u>	<u>Uchino</u>	<u>EP</u>	<b>Fav/CS</b>
2.	<u>Anderson</u>	<u>Yeatman</u>	<u>CA</u>	<b>Fav/CS</b>
3.	_____	_____	<u>RC</u>	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____

**Please see Section VIII. for Additional Information:**

- A. COMMITTEE SUBSTITUTE.....  Statement of Substantial Changes
- B. AMENDMENTS.....  Technical amendments were recommended
- Amendments were recommended
- Significant amendments were recommended

**I. Summary:**

CS/CS/SB 1028 creates s. 377.45, F.S., to establish the Fracturing Chemical Usage Disclosure Act. The bill requires the Department of Environmental Protection (DEP) to establish an online hydraulic fracturing chemical registry. The bill requires owners and operators of wells, service companies, and suppliers to disclose information about the chemicals used in hydraulic fracturing to the Chemical Disclosure Registry. The bill provides some exceptions to the disclosure requirements and authorizes the DEP to adopt rules to administer the chemical usage disclosure act.

This bill creates section 377.45 of the Florida Statutes.

**II. Present Situation:**

**Hydraulic Fracturing**

Hydraulic fracturing was first used in the United States in 1947 at the Hugoton field in Kansas,

and has become the standard method for stimulating production of oil and gas wells.<sup>1</sup>

Hydraulic fracturing is a technique that is done after a well has been drilled. Large amounts of fluid at high pressure are injected into a wellbore to create and extend fractures in the rock formation. The fractures are held open by a slurry mixture which allows natural gas to flow from the fractures into the production well.<sup>2</sup>

The injected fluid is composed of water, proppants, and chemical additives. The composition of the injected fluid varies between rock formations but the majority of the fluid, 98 to 99.5 percent, is water. The proppants are made of sand, ceramic pellets or other small incompressible particles that hold the fractures open. The chemical additives include bactericides, buffers, stabilizers, fluid-loss additives, and surfactants that improve the effectiveness of the fracturing process and prevent damage to the rock formation.<sup>3</sup>

The placement of the fracturing fluid is sequenced and the blend and proportions of the additives used vary depending on the characteristics of the rock formation; however, all of the additives are used during the fracturing process. The acid stage consists of several thousand gallons of water mixed with hydrochloric acid or muriatic acid that work to clear cement debris and create an open path for the fracturing fluids. The pad stage consists of approximately 100,000 gallons of “slick-water,” which is a friction reducing agent that reduces the pressure needed to pump fluid into the wellbore and facilitate the flow and placement of the proppant material. The proppant stage, which may include several sub-stages, uses several hundred thousand gallons of water mixed with varying sized particulates that keep the fractures open. Finally, there is a flushing stage that consists of enough water to adequately flush the excess proppant from the wellbore.<sup>4</sup>

Additional additives are used in the fracturing of Marcellus shale, including dilute acid solution, biocide or disinfectant to reduce the growth of bacteria, a scale inhibitor to reduce the build-up of carbonates and sulfate minerals, an iron control agent to inhibit the precipitation of iron compounds, friction reducing agents to decrease the amount of pressure needed to pump fluid to the wellbore, corrosion inhibitors to prevent the degradation of the steel well casing, gelling agents to help transport the proppant material, and a cross-linking additive to enhance the characteristics of the gelling agent.<sup>5</sup>

In 1986, Congress enacted the Emergency Planning and Community Right to Know Act (EPCRA), which requires federal, local and state governments to report hazardous and toxic chemicals in order to increase the public’s knowledge and access to information on chemicals at individual facilities. The EPCRA includes the Toxic Release Inventory (TRI), which is a publicly available database that contains information on chemical releases and waste management reported by certain industries. The U.S. Environmental Protection Agency (EPA)

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<sup>1</sup> U.S. Environmental Protection Agency, *White Paper: Hydraulic Fracturing White Paper* (2004), available at [http://www.epa.gov/ogwdw/uic/pdfs/cbmstudy\\_attach\\_uic\\_append\\_a\\_doe\\_whitepaper.pdf](http://www.epa.gov/ogwdw/uic/pdfs/cbmstudy_attach_uic_append_a_doe_whitepaper.pdf) (last visited Mar. 27, 2013).

<sup>2</sup> FracFocus Chemical Disclosure Registry, *Hydraulic Fracturing: The Process*, <http://fracfocus.org/hydraulic-fracturing-how-it-works/hydraulic-fracturing-process> (last visited Mar. 27, 2013).

<sup>3</sup> *Id.*

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

has not included oil and gas extraction as an industry that must report under the TRI because the EPA determined the oil and gas extraction industry is not a high priority for reporting. The decision is based on the fact that most of the information that the TRI requires is already reported by oil and gas providers to the individual state agencies and reporting for the hundreds and thousands of oil and gas sites would overwhelm the system.<sup>6</sup>

In May 2012, the Bureau of Land Management (BLM) published a proposed rule that would require companies that conduct hydraulic fracturing on lands managed by the BLM to disclose the composition of the fracturing fluid. Congress has also proposed legislation requiring the disclosure of chemicals under the Fracturing Responsibility and Awareness of Chemicals Act.<sup>7</sup>

To date, federal legislation has not been implemented to require the disclosure of chemicals used in hydraulic fracturing; therefore, many states have taken steps to develop their own chemical disclosure laws. The disclosure requirements that have been established in certain states include the information about the chemical additives and whether the disclosures are made to state agencies or available to the public, the composition of the chemicals, the protections provided in trade secrets, and when the disclosure of the chemicals is to take place in relation to the fracturing process.<sup>8</sup>

The Department of Environmental Protection's Oil and Gas Program is in the Mining and Minerals Regulation Program and is regulated under s. 377.01, F.S. Companies that are interested in oil and gas exploration or production in Florida must apply for a permit to drill the exploration well. Hydraulic fracturing is not currently being conducted in Florida.<sup>9</sup>

### **Chemical Disclosure Registry**

The Chemical Disclosure Registry is the national hydraulic fracturing chemical registry. It is managed by the Ground Water Protection Council and the Interstate Oil and Gas Compact Commission. The registry was created to provide the public access to reported chemicals used for hydraulic fracturing within their area. To help users put this information into perspective, the registry also provides objective information on hydraulic fracturing, the chemicals used, the purposes they serve and the means by which groundwater is protected. The Chemical Disclosure Registry does not replace state governmental information systems but is used by ten states as the primary means of state chemical disclosure. Currently, there are 41,118 well sites registered with the database.<sup>10</sup>

### **III. Effect of Proposed Changes:**

**Section 1** creates an unnumbered section of law to establish the "Fracturing Chemical Usage Disclosure Act."

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<sup>6</sup> *Id.*

<sup>7</sup> *Id.*

<sup>8</sup> Congressional Research Service, *Hydraulic Fracturing: Chemical Disclosure Requirements* (June 19, 2012) available at <http://www.fas.org/sgp/crs/misc/R42461.pdf> (last visited Mar. 27, 2013).

<sup>9</sup> *See* s. 377.01, F.S.

<sup>10</sup> *Supra* note 2.

**Section 2** creates s. 377.45, F.S., to establish the hydraulic fracturing chemical registry. The bill requires the DEP to establish and maintain an online hydraulic fracturing registry for all wells that use hydraulic fracturing.

The bill provides that DEP must require that a service provider, vendor, or well owner or operator report to the Chemical Disclosure Registry. The report must include the volume of water used, the chemical ingredients that are subject to regulation under 29 C.F.R. s. 1910.1200(g)(2), and the ingredient concentration in the hydraulic fluid by mass for each well on which hydraulic fracturing treatments are performed.

If the Chemical Disclosure Registry is unable to accept and make any information available to the public, then the well owner or operator is required to submit the information to the DEP.

The bill requires the service provider, vendor, or well owner or operator to report on which wells hydraulic fracturing is performed. The bill also requires the service provider, vendor, or well owner or operator to notify the DEP of any chemical that has not been previously reported. It also requires service companies that perform hydraulic fracturing treatments or the supplier of the additives to disclose the chemical ingredients to the owner or operator of the well.

The bill exempts chemicals that were not purposefully added to the hydraulic fracturing treatment, occur incidentally or are unintentionally in the treatment, or are not disclosed to the well owner or operator by the supplier.

The DEP may adopt rules to administer the requirements of the bill.

**Section 3** provides an effective date July 1, 2013.

#### **IV. Constitutional Issues:**

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

#### **V. Fiscal Impact Statement:**

A. Tax/Fee Issues:

None.

**B. Private Sector Impact:**

As there are currently no hydraulic fracturing operations in Florida, there is no impact to the private sector.

**C. Government Sector Impact:**

The cost to input information into Chemical Disclosure Registry or implement a registry required in the bill is minimal and may be done with existing resources at the DEP.<sup>11</sup> However, as stated above, there are currently no hydraulic fracturing operations in Florida.

**VI. Technical Deficiencies:**

None.

**VII. Related Issues:**

None.

**VIII. Additional Information:**

- A. **Committee Substitute – Statement of Substantial Changes:**  
(Summarizing differences between the Committee Substitute and the prior version of the bill.)

**CS/CS by Community Affairs on April 16, 2013:**

The committee substitute made the following changes:

- deletes provision linking FracFocus from DEP's website;
- deletes provision that DEP may not require chemical ingredients to be identified by concentration or based on the additive in which they are found.

**CS by Environmental Preservation and Conservation on April 9, 2013:**

The CS made the following substantive changes to the bill:

- specifies that the DEP, not the division, must establish and maintain the chemical registry;
- requires that the DEP provide a link to FracFocus on its website and if the registry is not able to accept the information specified in the bill, then the service provider, vendor, or well owner or operator must submit the information to the DEP.

**B. Amendments:**

None.

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This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.

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<sup>11</sup> Email from Pierce Schuessler, DEP, Legislative Affairs Director (Mar. 28, 2013) (on file with the Senate Committee on Environmental Preservation and Conservation).