

## HOUSE OF REPRESENTATIVES STAFF ANALYSIS

**BILL #:** CS/HB 191 Regulation of Oil and Gas Resources

**SPONSOR(S):** State Affairs Committee; Rodrigues and others

**TIED BILLS:** **IDEN./SIM. BILLS:** SB 318

| REFERENCE  | ACTION              | ANALYST | STAFF DIRECTOR or<br>BUDGET/POLICY CHIEF |
|--|---------------------|---------|--|
| 1) Agriculture & Natural Resources Subcommittee                | 9 Y, 4 N            | Gregory | Harrington                               |
| 2) Agriculture & Natural Resources Appropriations Subcommittee | 9 Y, 3 N            | Helping | Massengale                               |
| 3) State Affairs Committee                                     | 12 Y, 6 N, As<br>CS | Gregory | Camechis                                 |

### SUMMARY ANALYSIS

The Department of Environmental Protection's (DEP) Mining and Minerals Regulation Program in the Division of Water Resource Management (Division) oversees permitting for oil and gas drilling, production, and exploration through its Oil and Gas Program (Program). The bill makes the following revisions related to the Program:

- Preempts to the state the ability to regulate any activity related to oil and gas exploration, development, production, processing, storage, and transportation;
- Voids any county, municipality, or other political subdivision's ordinance or regulation (except for zoning ordinances passed before January 1, 2015) related to oil and gas exploration, development, production, processing, storage, and transportation;
- Empowers DEP to issue a single permit that authorizes multiple Program activities;
- Requires the Division, when determining whether to issue a permit, to consider the history of past adjudicated, uncontested, and settled violations committed by the applicant or an affiliated entity of any rule or law pertaining to the regulation of oil or gas, including violations that occurred outside the state;
- Allows information about past violations to be used as a basis for permit denial or imposition of permit conditions, including increased monitoring or increasing the required surety amount to up to five times the standard amount;
- Requires DEP to conduct inspections during specified Program activities;
- Defines "high-pressure well stimulation" as all stages of a well intervention performed by injecting fluids into a rock formation at high pressure that exceeds the fracture gradient of the rock formation to propagate fractures in such formation to increase production at an oil or gas well by improving the flow of hydrocarbons from the formation into the wellbore. The term does not include well stimulation or conventional workover procedures that may incidentally fracture the formation near the wellbore;
- Requires a well operator to obtain a permit, pay a fee, and provide a surety to DEP prior to performing a high-pressure well stimulation;
- Requires DEP to conduct a study on the potential effects of performing high-pressure well stimulations and provides an appropriation for the study;
- Requires certain individuals to report information relating to high-pressure well stimulations to DEP, including each chemical ingredient used in the well stimulation fluid, within 60 days of initiating the well stimulation;
- Requires DEP to designate the national chemical registry, known as FracFocus, as the state's registry for chemical disclosure for all wells on which high-pressure well stimulations are performed;
- Removes the requirement to receive municipal approval prior to granting an permit to drill a gas or oil well within the municipality's jurisdiction;
- Increases the maximum civil penalty for violation of any provision of the laws governing energy resources, including any rule, regulation, or order of the Division, or an oil or gas permit from \$10,000 to \$25,000 per offense; and
- Requires DEP to adopt rules to implement these changes. DEP may not issue permits to authorize high-pressure well stimulation until DEP adopts rules for high-pressure well stimulation. These rules must be based on the study performed by DEP. The Legislature must ratify the rules before they go into effect.

The bill has a significant negative fiscal impact on the state, an indeterminate but likely insignificant fiscal impact on local governments, and an indeterminate negative fiscal impact on the private sector.

This document does not reflect the intent or official position of the bill sponsor or House of Representatives.

STORAGE NAME: h0191f.SAC

DATE: 1/21/2016

# FULL ANALYSIS

## I. SUBSTANTIVE ANALYSIS

### A. EFFECT OF PROPOSED CHANGES:

#### Present Situation

##### Oil and Gas Production in Florida

Oil and gas production occurs in two major areas of Florida: the Sunniland Trend in South Florida and the Jay Field in the western panhandle.<sup>1</sup> The Sunniland Trend began producing in 1943 and is located in Lee, Hendry, Collier, and Dade counties.<sup>2</sup> The Jay Field, located in Escambia and Santa Rosa counties, began producing in 1970.<sup>3</sup> Oil production from the two regions peaked at 48 million barrels in 1978, but steadily declined over the years, producing only 2.2 million barrels in 2014.<sup>4</sup> Natural gas production decreased as well, from 52 billion cubic feet in 1978 to approximately 21 billion cubic feet in 2014.<sup>5</sup> There are currently 161 oil and gas wells actively operating in Florida.<sup>6</sup>

##### The Oil and Gas Program

The Department of Environmental Protection's (DEP) Mining and Minerals Regulation Program in the Division of Water Resource Management (Division) oversees permitting for oil and gas drilling, production, and exploration within Florida through its Oil and Gas Program (Program).<sup>7</sup> The Program's primary responsibilities include conserving and controlling the state's oil and gas resources and products; protecting the correlative rights of landowners, owners and producers of oil and gas resources and products, and others interested in these resources and products; safeguarding the health, property, and public welfare of the state's residents; and protecting the environment.<sup>8</sup> DEP addresses these concerns through a system of permits and field inspections to ensure compliance.

DEP must adopt rules and issue orders to implement and enforce the Program.<sup>9</sup> The rules and orders must ensure that all precautions are taken to prevent the spillage of oil or any other pollutant in all phases of the drilling for, and extracting of, oil, gas, or other petroleum products, or during the injection of gas into and recovery of gas from a natural gas storage reservoir.<sup>10</sup> DEP must adopt rules and orders for the following purposes:

- To require the drilling, casing, and plugging of wells to be done in such a manner as to prevent the pollution of the fresh, salt, or brackish waters or the lands of the state and to protect the integrity of natural gas storage reservoirs;
- To prevent the alteration of the sheet flow of water in any area;
- To require that appropriate safety equipment be installed to minimize the possibility of an escape of oil or other petroleum products in the event of accident, human error, or a natural disaster during drilling, casing, or plugging of any well and during extraction operations;
- To require the drilling, casing, and plugging of wells to be done in such a manner as to prevent the escape of oil or other petroleum products from one stratum to another;
- To prevent the intrusion of water into an oil or gas stratum from a separate stratum;
- To require a reasonable bond, or other form of security acceptable to the department, conditioned upon the performance of the duty to plug properly each dry and abandoned well and the full and complete restoration by the applicant of the area over which geophysical

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<sup>1</sup> Jacqueline M. Lloyd, *Florida Geological Survey Information Circular No. 107*, June 1991, available at <http://ufdcweb1.uflib.ufl.edu/UF00001168/00001/3x>.

<sup>2</sup> Id.

<sup>3</sup> Id.

<sup>4</sup> DEP, *Annual Production Reports*, available at [http://www.dep.state.fl.us/water/mines/oil\\_gas/data.htm](http://www.dep.state.fl.us/water/mines/oil_gas/data.htm) (last visited September 17, 2015).

<sup>5</sup> Id.

<sup>6</sup> Email from Amanda Marsh, Office of Legislative Affairs, DEP, RE: Oil and Gas Info (October 14, 2015).

<sup>7</sup> The Oil and Gas Program is governed by part 1 of ch. 377, F.S., and chs. 62C-25 through 62C-30, F.A.C.

<sup>8</sup> Section 377.06, F.S.

<sup>9</sup> Section 377.22(2), F.S.

<sup>10</sup> Id.

exploration, drilling, or production is conducted to the similar contour and general condition in existence prior to such operation;

- To require and carry out a reasonable program of monitoring or inspection of all drilling operations, producing wells, or injecting wells, including regular inspections by division personnel;
- To require the making of reports showing the location of all oil and gas wells; the making and filing of logs; the taking and filing of directional surveys; the filing of electrical, sonic, radioactive, and mechanical logs of oil and gas wells; if taken, the saving of cutting and cores, the cuts of which shall be given to the Bureau of Geology; and the making of reports with respect to drilling and production records;
- To prevent wells from being drilled, operated, or produced in such a manner as to cause injury to neighboring leases, property, or natural gas storage reservoirs;
- To prevent the drowning by water of any stratum, or part thereof, capable of producing oil or gas in paying quantities and to prevent the premature and irregular encroachment of water which reduces, or tends to reduce, the total ultimate recovery of oil or gas from any pool.
- To require the operation of wells with efficient gas-oil ratio, and to fix such ratios;
- To prevent “blowouts,” “caving,” and “seepage;”
- To prevent fires;
- To identify the ownership of all oil or gas wells, producing leases, refineries, tanks, plants, structures, and storage and transportation equipment and facilities;
- To regulate the “shooting,” perforating and chemical treatment of wells;
- To regulate secondary recovery methods, including the introduction of gas, air, water, or other substance into producing formations;
- To regulate gas cycling operations;
- To regulate the storage and recovery of gas injected into natural gas storage facilities;
- To, if necessary, determine, limit, and prorate the production of oil or gas, or both, from any pool or field in the state;
- To require certificates of clearance or tenders in connection with the transportation or delivery of oil or gas, or any product;
- To regulate the spacing of wells and to establish drilling units;
- To prevent, so far as is practicable, reasonably avoidable drainage from each developed unit which is not equalized by counterdrainage;
- To require that geophysical operations requiring a permit be conducted in a manner which will minimize the impact on hydrology and biota of the area, especially environmentally sensitive lands and coastal areas;
- To regulate aboveground crude oil storage tanks in a manner which will protect the water resources of the state; and
- To act in a receivership capacity for fractional mineral interests for which the owners are unknown or unlocated and to administratively designate the operator as the lessee.<sup>11</sup>

### *Permitting*

DEP possesses the power and authority to issue permits:

- For the drilling for, exploring for, or production of oil, gas, or other petroleum products that are to be extracted from below the surface of the land, including submerged land, only through the well hole drilled for oil, gas, and other petroleum products.<sup>12</sup>
- To explore for and extract minerals that are subject to extraction from the land by means other than through a well hole.<sup>13</sup>
- To establish natural gas storage facilities or construct wells for the injection and recovery of any natural gas for storage in natural gas storage reservoirs.<sup>14</sup>

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<sup>11</sup> Id.

<sup>12</sup> Section 377.242(1), F.S.

<sup>13</sup> Section 377.242(2), F.S.

<sup>14</sup> Section 377.242(3), F.S.

Before any geophysical operation in search of oil, gas, or minerals, the person desiring to conduct the operation must apply for a permit from DEP and pay a processing fee.<sup>15</sup> Geophysical operations consist of using various methods to locate geologic structures in the ground that could contain oil or gas.<sup>16</sup> These methods include gravity surveys, magnetic surveys, and seismic surveys.<sup>17</sup> The industry uses seismic surveys as its primary tool for locating areas containing oil or gas.<sup>18</sup> These surveys consist of using explosives or heavy vibrations to create sound pulses in the ground that reflect off geologic structures and are then captured by specialized microphones.<sup>19</sup> The surveyors use the collected data to establish drilling targets.

After a drilling target is established, a person who would like to drill a well in search of oil or gas or drill a well to inject gas into and recover gas from a natural gas storage reservoir must notify the Division, pay a fee,<sup>20</sup> and obtain a separate permit authorizing the drilling before the drilling commences.<sup>21</sup> These drilling permits are valid for one year and may be renewed for an additional year provided the permit holder does not request any substantive changes.<sup>22</sup> After a well is drilled, a person must obtain a separate operating permit and pay a fee<sup>23</sup> before using the well for its intended purpose, such as producing oil, disposing of saltwater, or injecting fluids for pressure maintenance.<sup>24</sup> An operating permit is valid for the life of the well, but both the well and permit must be re-certified every five years.<sup>25</sup> A person must obtain a separate permit before they store gas in or recover gas from a natural gas storage reservoir.<sup>26</sup>

When evaluating a permit application, DEP must consider:

- The nature, character, and location of the lands involved; and whether the lands are rural, such as farms, groves, or ranches, or urban property vacant or presently developed for residential or business purposes or are in such a location or of such a nature as to make such improvements and developments a probability in the near future;
- The nature, type, and extent of ownership of the applicant, including such matters as the length of time the applicant has owned the rights claimed without having performed any of the exploratory operations so granted or authorized;
- The proven or indicated likelihood of the presence of oil, gas, or related minerals in such quantities as to warrant the exploration and extraction of such products on a commercially profitable basis; and
- For activities and operations concerning a natural gas storage facility, whether the nature, structure, and proposed use of the natural gas storage reservoir is suitable for the storage and recovery of gas without adverse effect to public health or safety or the environment.<sup>27</sup>

DEP must weigh these criteria and balance environmental interests against the applicant's right to explore for oil.<sup>28</sup>

DEP may not permit to drill a well in search of oil or gas:

- In Florida's territorial waters in the gulf of Mexico or Atlantic Ocean,<sup>29</sup>
- In bays or estuaries,<sup>30</sup>

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<sup>15</sup> Section 377.2408(1), F.S.

<sup>16</sup> Department of Environmental Protection, *Oil & Gas: Geophysical Prospecting*, available at [http://www.dep.state.fl.us/water/mines/oil\\_gas/docs/OilGasGeophysicalProspectingFactSheet.pdf](http://www.dep.state.fl.us/water/mines/oil_gas/docs/OilGasGeophysicalProspectingFactSheet.pdf) (last visited September 16, 2015).

<sup>17</sup> Id.

<sup>18</sup> Id.

<sup>19</sup> Id.

<sup>20</sup> The fee to apply for a drilling permit is currently \$2,000. Rule 62C-26.003(8), F.A.C.

<sup>21</sup> Sections 377.24 and 377.2407, F.S.

<sup>22</sup> Rule 62C-26.007(4), F.A.C.

<sup>23</sup> The fee to apply for an operating permit is currently \$2,000. Rule 62C-26.008(3), F.A.C.

<sup>24</sup> Rule 62C-26.008, F.A.C.

<sup>25</sup> Id.

<sup>26</sup> Section 377.24(1), F.S.

<sup>27</sup> Section 377.241, F.S.

<sup>28</sup> *Coastal Petroleum Co. v. Florida Wildlife Federation, Inc.*, 766 So. 2d 226, 228 (Fla. 1st DCA 1999).

<sup>29</sup> Sections 377.24(9) and 377.242(1)(a)5., F.S.

- Within one mile of coastline;<sup>31</sup>
- Within 1 mile of seaward boundary of any local, state, or federal park or aquatic or wildlife preserve;<sup>32</sup> and
- Within 1 mile inland from Gulf, Atlantic, any bay, or any estuary 1 mile of any freshwater lake, river, or stream unless the DEP is satisfied that the natural resources of such bodies of water and shore areas of the state will be adequately protected in the event of accident or blowout.<sup>33</sup>

### *Payment of Surety*

Before DEP may grant a permit, the permit applicant must provide surety that the exploration, drilling, or production activity requested in the application will be conducted in a safe and environmentally compatible manner.<sup>34</sup> An applicant for a drilling, production, or injection well permit or a geophysical permit may provide the following types of surety to meet this requirement:

- A deposit of cash or other securities made payable to the Minerals Trust Fund;
- A bond of a surety company authorized to do business in the state; or
- A surety in the form of an irrevocable letter of credit guaranteed by an acceptable financial institution.<sup>35</sup>

Individuals conducting geophysical operations must provide a surety of \$25,000 per field crew or \$100,000 per operation.<sup>36</sup> For wells, the amount of the required surety varies based on the depth of the well drilled and whether the well becomes an operating well.<sup>37</sup> Currently, well drilled between zero and 9,000 feet deep require an initial surety of \$50,000, and a well drilled at 9,001 feet deep or more requires a \$100,000 surety.<sup>38</sup> If a drilled well becomes an operating well, the required surety for the well is twice the initial surety amount.<sup>39</sup> In lieu of furnishing separate securities for each well, an owner or operators may provide a blanket bond of \$1,000,000, which can cover up to ten wells.<sup>40</sup> When all drilling, exploration, and production activities have ceased and permit conditions satisfied, DEP releases the security.<sup>41</sup>

Alternatively, an applicant for a drilling, production, or injection well permit, or a permittee who intends to continue participating in long-term production activities, may meet the surety requirement by paying an annual fee to the Minerals Trust Fund based on the following amounts:

- For the first year, or part of a year, the fee is \$4,000 per permitted well.
- For each subsequent year, or part of a year, the fee is \$1,500 per permitted well.<sup>42</sup>

The maximum fee that an applicant or permittee may be required to pay into the Minerals Trust Fund is \$30,000 per calendar year, regardless of the number of permits applied for or in effect.<sup>43</sup>

### *Inspections*

DEP monitors and inspects drilling operations, producing wells, or injecting wells.<sup>44</sup> Division staff working in the field offices inspect all permitted activities. Each permit issued by DEP must contain an agreement that the permit holder will not prevent inspection by Division personnel at any time.<sup>45</sup>

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<sup>30</sup> Section 377.242(1)(a)1., F.S.

<sup>31</sup> Section 377.242(1)(a)2., F.S.

<sup>32</sup> Section 377.242(1)(a)3., F.S.

<sup>33</sup> Section 377.242(1)(a)4., F.S.

<sup>34</sup> Section 377.2425(1), F.S.

<sup>35</sup> Id.

<sup>36</sup> Rule 62C-26.007(5), F.A.C.

<sup>37</sup> Rule 62C-26.002(1), F.A.C.

<sup>38</sup> Rule 62C-26.002(2), F.A.C.

<sup>39</sup> Id.

<sup>40</sup> Id.

<sup>41</sup> Rule 62C-26.002(7), F.A.C.

<sup>42</sup> Section 377.2425(1)(b), F.S.

<sup>43</sup> Id.

<sup>44</sup> Section 377.22(2)(g), F.S.

## Penalties

A person who violates any statute, rule, regulation, order, or permit of the Program is liable to the state for any damage caused to the air, waters, or property, including animal, plant, or aquatic life, of the state and for reasonable costs and expenses of the state in tracing the source of the discharge, in controlling and abating the source and the pollutants, and in restoring the air, waters, and property of the state.<sup>46</sup> Further, civil penalty not to exceed \$10,000 per offense may be imposed on such violators.<sup>47</sup> Each day during any portion of which a violation occurs constitutes a separate offense.<sup>48</sup> These penalties also apply to a person who refuses inspection by the Division.<sup>49</sup>

## Well Stimulation

Underground oil and gas often forms in certain rock formations resistant to conventional methods of drilling. Some of these rock formations are less permeable than traditional reservoirs of oil and gas. A traditional reservoir of oil and/or gas will be permeable enough to naturally allow the migration of oil and/or gas out of the reservoir rock. However, the decreased permeability of some reservoir rock formations traps oil and gas within the reservoir. The most common types of rock formations trapping oil and gas in this fashion are shale, sandstone, and methane coalbeds.<sup>50</sup> Until recently, these formations rarely produced oil or gas due to their lack of permeability. The development of horizontal drilling, combined with hydraulic fracturing, has made oil and gas production from these formations more feasible.<sup>51</sup>

Well stimulation refers to any action taken by a well operator to increase the inherent productivity of an oil or gas well.<sup>52</sup> Common examples of well stimulation treatments are hydraulic fracturing and acid fracturing. Both hydraulic fracturing and acid fracturing involve the pressurized injection of fluids and chemicals to create fractures within a rock formation. The fractures then allow for more oil and gas to escape the rock formation and migrate up the well.

## Hydraulic Fracturing

Hydraulic fracturing consists of using fluid and material to create or restore fractures in a rock formation to stimulate production. A hydraulic fracturing well is first drilled vertically. Then the well is drilled horizontally directly into the reservoir rock. The fracturing fluid and materials are pressurized and released through small perforations in the well casing. The pressurized mixture causes the rock layer to fracture. The fissures are held open by the proppant to allow natural gas and oil to flow into and out of the well. Fractured rock formations may be refractured to allow for continued flow of any remaining oil and gas. This process allows for future productivity of older wells.<sup>53</sup>

The composition of a fracturing fluid varies with the nature of the formation, but typically contains large amounts of water, a proppant to keep the fractures open (typically sand), and chemical additives. Each hydraulic fracturing well can require between one and seven million gallons of water. The chemical additives include a friction reducer, biocides (to kill bacteria), a scale inhibitor, surfactants, and breakers.<sup>54</sup> Scale inhibitors prevent the buildup of scale<sup>55</sup> on the drilling equipment. The breakers and

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<sup>45</sup> Section 377.242, F.S.

<sup>46</sup> Section 377.37(1)(a), F.S.

<sup>47</sup> Id.

<sup>48</sup> Id.

<sup>49</sup> Id.

<sup>50</sup> See generally Hannah Wiseman & Francis Gradijan, *Regulation of Shale Gas Development, Including Hydraulic Fracturing* (Univ. of Tulsa Legal Studies, Research Paper No. 2011-11), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1953547](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1953547).

<sup>51</sup> Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands; Final Rule, 80 Fed. Reg. 16130 – 16131 (proposed March 26, 2015)(to be codified at 43 C.F.R. 3160).

<sup>52</sup> Keith B. Hall, *Recent Developments in Hydraulic Fracturing Regulation and Litigation*, 29 J. LAND USE & ENVTL. L. 29, 22 (2013).

<sup>53</sup> See generally Wiseman & Francis Gradijan.

<sup>54</sup> Id.

<sup>55</sup> “Scale” is inorganic soluble salts that form when incompatible types of water are mixed. Scale buildup can cause costly damage to equipment parts.

friction reducer help to transport the proppants into the fracture, as well as remove them. The surfactants help control water's reaction with other fluids (in this case, oil and/or gas). A typical fracture treatment will use between three and 12 additive chemicals depending on the characteristics of the water and the shale formation being fractured; most often, either 10 or 11 are used. These chemicals are selected from a list of over 250 chemicals.<sup>56</sup> The chemicals typically make up between 1 percent and 2 percent of the hydraulic fracturing fluid, by weight.<sup>57</sup>

### *Acid Fracturing*

Acid fracturing, also known as acidizing, is most often used in limestone formations and other carbonate formations because the permeability of limestone varies and is too complex for conventional hydraulic fracturing. Carbonate formations can be dissolved by acid. Acid fracturing is similar to hydraulic fracturing with some differences. A fluid is still injected at fracturing pressures, but it also includes a diluted acid, either hydrochloric acid or formic acid, to "etch" channels into the rock formation. The channels created through the rock formation can either let oil and gas escape as is, or can also be propped open with sand, as with hydraulic fracturing. "The effective fracture length is a function of the type of acid used, the acid reaction rate, and the fluid loss from the fracture into the formation."<sup>58</sup>

### *Well Stimulation in Florida*

DEP's rules currently require an operator to notify DEP before beginning any workover operation on an oil or gas well.<sup>59</sup> A workover is defined as "an operation involving a deepening, plug back, repair, cement squeeze, perforation, hydraulic fracturing, acidizing, or other chemical treatment which is performed in a production, disposal, or injection well in order to restore, sustain, or increase production, disposal, or injection rates."<sup>60</sup> Thus, an operator performing a well stimulation need not apply for a separate permit authorizing the well stimulation, but must only provide notification to DEP before beginning the operation.

Both hydraulic fracturing and acid fracturing have been utilized in Florida. According to DEP, the last hydraulic fracturing on record was conducted in the Jay Field in 2003.<sup>61</sup> Acid fracturing was used for the first time in Florida in Collier County in 2013, but the operation was halted by a cease and desist order from DEP based on concerns about groundwater contamination.<sup>62</sup>

### *Disclosure of Well Stimulation Chemicals*

In March 2015, the Bureau of Land Management (BLM), part of the U.S. Department of the Interior, published its final rule that requires disclosures about chemicals used in hydraulic fracturing on federal and Indian lands.<sup>63</sup> After hydraulic fracturing is complete, BLM requires the driller to provide a description of the base fluid and each additive in the hydraulic fracturing fluid.<sup>64</sup> Some commenters on the rule requested that BLM only require disclosure of chemicals required for disclosure on Manage Materials Safety Data Sheets.<sup>65</sup> However, BLM determined that other chemicals used during hydraulic fracturing might be harmful to humans in an environmental setting, and therefore, disclosure would be

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<sup>56</sup> For a list of the chemicals most often used, see *What Chemicals Are Used*, FRAC FOCUS, <https://fracfocus.org/chemical-use/what-chemicals-are-used> (last visited October 28, 2015).

<sup>57</sup> 80 Fed. Reg. 16131.

<sup>58</sup> The Society of Petroleum Engineers, *Continuous Improvements in Acid Fracturing at Lake Maracaibo*, J. Petroleum Tech. 54 (2006), available at [http://www.slb.com/~media/Files/stimulation/industry\\_articles/200607\\_cont\\_imp.pdf](http://www.slb.com/~media/Files/stimulation/industry_articles/200607_cont_imp.pdf).

<sup>59</sup> Rule 62C-29.006(1), F.A.C.

<sup>60</sup> Rule 62C-25.002(61), F.A.C.

<sup>61</sup> DEP, *Frequent Questions about the Oil and Gas Permitting Process*, available at [http://www.dep.state.fl.us/water/mines/oil\\_gas/docs/faq\\_og.pdf](http://www.dep.state.fl.us/water/mines/oil_gas/docs/faq_og.pdf), (last visited September 16, 2015).

<sup>62</sup> DEP, *Collier Oil Drilling*, [http://www.dep.state.fl.us/secretary/oil/collier\\_oil.htm](http://www.dep.state.fl.us/secretary/oil/collier_oil.htm) (last visited September 16, 2015).

<sup>63</sup> 80 Fed. Reg. 16128; See also Bureau of Land Management, *Interior Department Releases Final Rule to Support Safe, Responsible Hydraulic Fracturing Activities on Public and Tribal Lands*,

[http://www.blm.gov/wo/st/en/info/newsroom/2015/march/nr\\_03\\_20\\_2015.html](http://www.blm.gov/wo/st/en/info/newsroom/2015/march/nr_03_20_2015.html), (last visited September 16, 2015).

<sup>64</sup> 80 Fed. Reg. 16220.

<sup>65</sup> 80 Fed. Reg. 16170.

required.<sup>66</sup> BLM does not require chemical disclosure prior to drilling because operators often change chemical composition after permit approval in response to chemical availability, change in vendor, and unexpected geological conditions.<sup>67</sup> Operators may request that chemical information not be disclosed to the public.<sup>68</sup> These companies have traditionally kept the chemical composition confidential to preserve a competitive advantage.<sup>69</sup>

Wyoming and several other states challenged BLM's rule stating the agency lacked the power to regulate the activity.<sup>70</sup> A federal judge issued a preliminary injunction barring implementation of the rule and the case is currently awaiting resolution.<sup>71</sup>

Of the states that produce oil, natural gas, or both, at least 15 require some disclosure of information about the chemicals added to the hydraulic fracturing fluid used to stimulate a particular well.<sup>72</sup> These provisions vary widely, but generally indicate: (1) which parties must disclose information about chemical additives and whether these disclosures must be made to the public or a state agency; (2) what information about chemicals added to a hydraulic fracturing fluid must be disclosed, including how specifically parties must describe the chemical makeup of the hydraulic fracturing fluid and the additives that are combined with it; (3) what protections, if any, will be given to trade secrets; and (4) at what time disclosure must be made in relation to when fracturing takes place.<sup>73</sup>

#### Local Regulation of Oil and Gas Production

In certain instances, DEP may not issue a permit without specified approval. DEP may not issue permits to drill a gas or oil well:

- Within the corporate limits of a municipality without a resolution approving the permit from the governing authority;<sup>74</sup>
- In tidal waters abutting or immediately adjacent to the corporate limits of a municipality or within 3 miles of such corporate limits extending from the line of mean high tide into such waters without a resolution approving the permit from the governing authority;<sup>75</sup> or
- On any improved beach, located outside of an incorporated town or municipality, or at a location in the tidal waters abutting or immediately adjacent to an improved beach, or within 3 miles of an improved beach extending from the line of mean high tide into such tidal waters without a resolution approving the permit from the county commission.<sup>76</sup>

If the proposed oil or gas well is on lands owned by the Board of Trustees of the Internal Improvement Trust Fund (BOT), it may not grant a lease for gas, oil, or mineral rights:

- Within the corporate limits of a municipality without a resolution approving the lease from the governing authority;<sup>77</sup>
- In tidal waters abutting or immediately adjacent to the corporate limits of a municipality or within 3 miles of such corporate limits extending from the line of mean high tide into such waters without a resolution approving the lease from the governing authority;<sup>78</sup>

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<sup>66</sup> Id.

<sup>67</sup> 80 Fed. Reg. 16149.

<sup>68</sup> 80 Fed. Reg. 16221.

<sup>69</sup> 29 J. Land Use & Envtl. L. at 35.

<sup>70</sup> Casper Star Tribune, Benjamin Storrow, *Federal judge issues stay on BLM fracking rule*, [http://trib.com/business/energy/federal-judge-issues-stay-on-blm-fracking-rule/article\\_7e14957f-11d9-5120-b1d9-e86bf382bb1c.html](http://trib.com/business/energy/federal-judge-issues-stay-on-blm-fracking-rule/article_7e14957f-11d9-5120-b1d9-e86bf382bb1c.html) (last visited September 15, 2015).

<sup>71</sup> Id. See also Amy Harder Wall Street Journal, *Federal Court Blocks Obama Administration Fracking Rule*, <http://www.wsj.com/articles/federal-court-blocks-obama-administration-hydraulic-fracturing-rule-1443641565> (last visited September 30, 2015).

<sup>72</sup> Brandon J. Murrill and Adam Vann, *Hydraulic Fracturing: Chemical Disclosure Requirements*, Congressional Research Service (June 19, 2012), available at <http://fas.org/sgp/crs/misc/R42461.pdf> (last visited September 16, 2015).

<sup>73</sup> Id.

<sup>74</sup> Section 377.24(5), F.S.

<sup>75</sup> Section 377.24(6), F.S.

<sup>76</sup> Section 377.24(7), F.S.

<sup>77</sup> Section 253.61(1)(a), F.S.

<sup>78</sup> Section 253.61(1)(b), F.S.



- On any improved beach, located outside of an incorporated town or municipality, or at a location in the tidal waters abutting or immediately adjacent to an improved beach, or within 3 miles of an improved beach extending from the line of mean high tide into such tidal waters without a resolution approving the lease from the county commission;<sup>79</sup> or
- In Florida's territorial waters in the Gulf of Mexico or Atlantic Ocean.<sup>80</sup>

According to DEP, no counties or municipalities currently operate oil and gas permitting programs. However, some municipalities have banned hydraulic fracturing in their jurisdictions.<sup>81</sup>

## **Effect of Proposed Changes**

### State Preemption

The bill amends s. 377.06, F.S., to preempt counties, municipalities, or other political subdivisions from regulating any activity related to oil and gas exploration, development, production, processing, storage, and transportation. Further, the bill voids any county, municipality, or other political subdivision's ordinance or regulation related to oil and gas exploration, development, production, processing, storage, and transportation. Counties and municipalities may, however, enforce zoning ordinances adopted before January 1, 2015.

### Permits for Oil and Gas Exploring, Drilling, and Extracting

The bill adds s. 377.241(6), F.S., to require the Division, when determining whether to issue a permit for activities related to oil and gas, to consider the history of past adjudicated, uncontested, or settled violations committed by the applicant or an affiliated entity of any substantive and material rule or law pertaining to the regulation of oil or gas, including violations that occurred outside the state. This information may be used as a basis for permit denial or imposition of specific permit conditions, including increased monitoring, or increasing the amount of the required surety to up to five times the standard amount. The bill amends s. 377.22(2), F.S., to authorize DEP to adopt rules to implement this requirement.

Further, the bill amends s. 377.24(1), F.S., to empower DEP, when issuing a permit for activities related to oil and gas drilling and extracting, to authorize multiple activities in a single permit.

### Inspections

The bill amends s. 377.22(2)(g), F.S., to require DEP's rules and orders to require inspections during the testing of blowout preventers, during the pressure testing of the casing and casing shoe, and during the integrity testing of the cement plugs in plugging and abandonment operations. The bill amends s. 377.242, F.S., to require each permit to contain an agreement that the permit holder will not prevent inspections during these activities.

### High-Pressure Well Stimulation Permits

The bill amends s. 377.24, F.S., to specifically authorize DEP to issue permits for performance of a high-pressure well stimulation. The bill requires DEP to issue orders and adopt rules to implement the permitting requirements for high-pressure well stimulations and to ensure that all precautions are taken to prevent the spillage of oil or any other pollutant during these operations.

The bill amends s. 377.19, F.S., to define "high-pressure well stimulation" as a well intervention performed by injecting fluids into a rock formation at high pressure that exceeds the fracture gradient of the rock formation to propagate fractures in such formation to increase production at an oil or gas well by improving the flow of hydrocarbons from the formation into the wellbore. The term does not include well stimulation or conventional workover procedures that may incidentally fracture the formation near the wellbore.

<sup>79</sup> Section 253.61(1)(c), F.S.

<sup>80</sup> Section 253.61(1)(d), F.S.

<sup>81</sup> Bonita Springs: <http://www.news-press.com/story/news/local/bonita-springs/2015/07/15/crowd-cramps-bonita-city-hall-ahead-of-fracking-vote/30182897/> (last visited September 18, 2015).

The bill amends s. 377.24, F.S., to impose on high-pressure well stimulations the same permitting requirements that apply to drilling an oil or gas well. Thus, a person who would like to perform a high-pressure well stimulation must first apply for and obtain a permit from DEP that authorizes the activity and must also pay a fee not to exceed the actual cost of processing and inspecting for each well. While the permitting criteria for all oil and gas permits will now apply to high-pressure well stimulation permits, the bill also creates additional criteria applicable to permits for high-pressure well stimulation. Specifically, the bill amends s. 377.241, F.S., to direct the Division, when issuing a permit, to consider whether the high-pressure well stimulation is designed to ensure that:

- The groundwater near the well location, including groundwater through which the well will be or has been drilled, is not contaminated by the high-pressure well stimulation; and
- The high-pressure well stimulation is consistent with the public policy of the state.

The bill also amends s. 377.2425, F.S., to require that high-pressure well stimulation permit applicants or operators provide surety to DEP that the activity will be conducted in a safe and environmentally compatible manner before DEP may grant a permit. The surety requirement for high-pressure well stimulation is the same as the surety required for other oil and gas permits.

The bill prohibits DEP from issuing permits for high-pressure well stimulation until rules for high-pressure well stimulation are adopted. These rules must be based on the study discussed below. Further, the bill requires DEP to submit its proposed rules for high-pressure well stimulation to the President of the Senate and Speaker of the House of Representatives. The rules may not go into effect until the study has been submitted to the Legislature and the rules are ratified by the Legislature. Lastly, the bill requires DEP to adopt the rules by March 1, 2018, if such rules are warranted.

#### Study on High-Pressure Well Stimulation

The bill creates s. 377.2436, F.S., to require DEP to conduct a study on high-pressure well stimulation that:

- Evaluates the underlying geologic features present in the counties where oil wells have been permitted and analyzes the potential impact that high-pressure well stimulation and wellbore construction may have on the underlying geologic features;
- Evaluates the potential hazards and risks that high-pressure well stimulation poses to surface water or groundwater resources, including an assessment of the potential impacts on drinking water resources, identification of the main factors affecting the severity and frequency of impacts, and an analysis of the potential for the use or reuse of recycled water in well stimulation fluids while meeting appropriate water quality standards;
- Reviews and evaluates the potential for groundwater contamination from conducting high-pressure well stimulation under or near wells that have been previously plugged and abandoned and identifies a setback radius from previously plugged and abandoned wells that could be impacted by high-pressure well stimulation;
- Reviews and evaluates the ultimate disposition of well stimulation fluids after use in well stimulation processes;
- Reviews and evaluates the potential direct and indirect economic benefits from the use of high pressure well stimulation, including the effect on state and local tax revenues, royalty payments, employment opportunities, and demand for goods and services;
- Reviews and evaluates potential seismic activity associated with high-pressure well stimulation and deep-well disposal of oil and gas production wastewater; and
- Reviews and evaluates the feasibility and impact of waterless fracking to perform high-pressure well stimulation.

The bill specifies that DEP must continue conventional oil and gas business operations during the performance of the study and prohibits a moratorium on the evaluation and issuance of permits for conventional drilling, exploration, conventional completions, or conventional workovers during the study. The bill provides that the study is subject to independent scientific peer review.

The bill requires the findings of the study to be posted on DEP's website and submitted to the Governor, the President of the Senate, and the Speaker of the House of Representatives by June 30, 2017.

The bill appropriates \$1 million in nonrecurring funds from the General Revenue Fund to DEP for the purpose of performing the study.

#### High-Pressure Well Stimulation Chemical Disclosure Registry

The bill creates s. 377.45, F.S., to require DEP to designate the national chemical registry, known as FracFocus, as the state's registry for chemical disclosure for all wells on which high-pressure well stimulations are performed. DEP must provide a link to FracFocus on its website. The bill requires a service provider, vendor, or well owner or operator to report to DEP, at a minimum, the following information:

- The name of the service provider, vendor, or well owner or operator;
- The date of completion of the high-pressure well stimulation;
- The county in which the well is located;
- The API (American Petroleum Institute) number for the well;
- The well name and number;
- The longitude and latitude of the wellhead;
- The total vertical depth of the well;
- The total volume of water used in the high-pressure well stimulation;
- Each chemical ingredient that is subject to 29 C.F.R. s. 1910.1200(g)(2)<sup>82</sup> and the ingredient concentration in the high-pressure well stimulation fluid by mass for each well on which a high-pressure well stimulation is performed; and
- The trade or common name and the CAS registry number for each chemical ingredient.

DEP must report the information listed above to FracFocus, excluding any information protected under ch. 688, F.S., which relates to trade secrets. If FracFocus cannot accept and make publicly available any of the required information, the bill requires DEP to post the information on its website, excluding any information protected under ch. 688, F.S., which relates to trade secrets.

The bill requires a service provider, vendor, or well owner or operator to report the required information to DEP within 60 days after the initiation of the high-pressure well stimulation for each well on which it is performed. The service provider, vendor, or well owner or operator is also required to notify DEP if any chemical ingredient not previously reported is intentionally included and used for the purpose of performing a high-pressure well stimulation.

The bill specifies that the chemical disclosure requirements do not apply to an ingredient that is not intentionally added to the high-pressure well stimulation or that occurs incidentally or is otherwise unintentionally present in a high-pressure well stimulation.

The bill requires DEP to adopt rules to implement the chemical disclosure requirements.

#### Local Regulation of Oil and Gas Production

The bill amends subsection 377.24(5), F.S., to prohibit DEP from issuing a permit to drill a gas or oil well if the applicant has not provided notice of the permit application to the governing authority of the county or municipality where the activity is proposed. The subsection previously prohibited DEP from issuing permits within the corporate limits of a municipality without a resolution approving the permit from the governing authority. The bill also adds subsection 377.241(7), F.S., to require DEP to consider matters raised in comments timely submitted by a municipality when evaluating an oil and gas permit application.

#### Penalties

The bill amends s. 377.37, F.S., to increase the maximum civil penalty that may be imposed on a person who violates any provision of ch. 377, F.S., or any rule, regulation, or order of the Division made

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<sup>82</sup> 29 C.F.R. s. 1910.1200(g)(2) specifies the information that must be included in reports that chemical manufacturers and importers are required to prepare for the purpose of alerting employers and employees to chemical hazards in the workplace. These are called Material Safety Data Sheets.

under the chapter or who violates the terms of an oil or gas permit from \$10,000 to \$25,000 per offense. Each day during any portion of which a violation occurs constitutes a separate offense.

**B. SECTION DIRECTORY:**

- Section 1.** Amends s. 377.06, F.S., preempting the regulation of all matters relating to the exploration, development, production, processing, storage, and transportation of oil and gas.
- Section 2.** Amends s. 377.19, F.S., relating to definitions used in ch. 377, F.S.
- Section 3.** Amends s. 377.22, F.S., revising the rulemaking authority of DEP.
- Section 4.** Amends s. 377.24, F.S., relating to oil and gas well drilling permits.
- Section 5.** Amends s. 377.241, F.S., relating to criteria for issuance of permits.
- Section 6.** Amends s. 377.242, F.S., relating to permits for oil and gas drilling, exploration, and extraction.
- Section 7.** Amends s. 377.2425, F.S., relating to providing a surety for oil and gas production.
- Section 8.** Creates s. 377.2436, F.S., relating to a study on high-pressure well stimulation.
- Section 9.** Amends s. 377.37, F.S., relating to penalties for oil and gas for oil and gas law violations.
- Section 10.** Creates s. 377.45, F.S., relating to disclosure of high-pressure well stimulation chemicals.
- Section 11.** Amends s. 377.07, F.S., conforming provisions to changes made by the act.
- Section 12.** Amends s. 377.10, F.S., conforming provisions to changes made by the act.
- Section 13.** Amends s. 377.243, F.S., conforming provisions to changes made by the act.
- Section 14.** Amends s. 377.244, F.S., conforming provisions to changes made by the act.
- Section 15.** Provides an appropriation.
- Section 16.** Provides an effective date of July 1, 2016.

**II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT**

**A. FISCAL IMPACT ON STATE GOVERNMENT:**

**1. Revenues:**

The bill may have an indeterminate positive fiscal impact on the state because it requires oil and gas well operators to pay a permit fee before performing a high-pressure well stimulation and provide financial surety that performance will be conducted in a safe and environmentally compatible manner. Options of surety include cash deposit to the Minerals Trust Fund, a surety bond or an irrevocable letter of credit in an amount as provided by rule and guaranteed by an acceptable financial institution. According to DEP, the total fiscal impact of the permit fees and surety requirement is indeterminate at this time since the permit fee would be established during the

rulemaking process and it is unknown how many permits would be sought for high pressure well stimulations.<sup>83</sup>

The bill may also have an indeterminate positive fiscal impact on the state because it raises the maximum fine that may be imposed for violation of any oil and gas law, rule, regulation, or order from \$10,000 to \$25,000 per offense, which would also be deposited in the Minerals Trust Fund. According to DEP, the fiscal impact from the increase in penalties is indeterminate because it is unknown how many violations triggering the payment of fines would occur in the future.<sup>84</sup>

2. Expenditures:

The bill has a significant negative fiscal impact on the state because it requires DEP to conduct a study on the potential effects of performing high-pressure well stimulations. According to DEP, this study will cost approximately \$1 million.<sup>85</sup> The bill provides \$1 million to DEP in nonrecurring funds from the General Revenue Fund for the purpose of performing the study.

According to DEP, the cost of rulemaking can be absorbed within the existing department's budget.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

See CONSTITUTIONAL ISSUES: Applicability of Municipality/County Mandates Provision.

2. Expenditures:

See CONSTITUTIONAL ISSUES: Applicability of Municipality/County Mandates Provision.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The bill may have an indeterminate negative fiscal impact on the private sector because it requires oil and gas well operators to pay a permit fee (to be determined by DEP), associated permit application preparation costs, and provide financial surety before performing a high-pressure well stimulation.

The bill may also have an indeterminate negative fiscal impact on the private sector because it raises the maximum fine that may be imposed for violation of any oil and gas law, rule, regulation, or order from \$10,000 to \$25,000 per offense.

D. FISCAL COMMENTS:

None.

### III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

The county/municipality mandates provision of Art. VII, s. 18(b) of the Florida Constitution may apply because the bill may reduce the authority of counties and municipalities to raise total aggregate revenues as such authority existed on February 1, 1989, by prohibiting them from adopting or establishing programs to issue permits for any activity related to oil and gas drilling, exploration, or production for which DEP has permitting authority. According to DEP, no counties or municipalities currently operate such permitting programs. Therefore, an exemption to the mandates provision may apply because the fiscal impact of the reduced authority is likely insignificant.

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<sup>83</sup> Email from Amanda Marsh, Legislative Specialist, Department of Environmental Protection, Fwd: HB 191 Analysis (Nov. 25, 2015).

<sup>84</sup> Id.

<sup>85</sup> According to an email from DEP staff received on March 23, 2015.

An exception to the mandates provision may also apply because the bill applies to all persons similarly situated. However, the Legislature would have to make a formal determination that the bill fulfills an important state interest.

If the exemption and exception do not apply and the bill does qualify as a mandate, final passage must be approved by two-thirds of the membership of each house of the Legislature.

2. Other:

None.

**B. RULE-MAKING AUTHORITY:**

The bill requires DEP to adopt rules to implement the permitting requirements for high-pressure well stimulations and to ensure that all precautions are taken to prevent the spillage of oil or any other pollutant during these operations. DEP may not issue permits for high-pressure well stimulation until it adopts rules for high-pressure well stimulation. The bill also requires DEP to adopt rules to evaluate previous violations of permit applicants, conduct specific inspection activities, require reports for high-pressure well stimulations, and require chemical disclosure to FracFocus for high-pressure well stimulations.

**C. DRAFTING ISSUES OR OTHER COMMENTS:**

None.

**IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES**

On January 21, 2016, the State Affairs Committee adopted a strike-all amendment and reported the bill favorably with committee substitute. The amendment:

- Requires DEP to adopt rules to evaluate prior uncontested and settled violations committed by the permit applicant or the applicant's affiliated entities of any substantive and material rule or law pertaining to the regulation of oil or gas. DEP may use this information as a basis for permit denial or imposition of specific permit conditions, including increased monitoring, or increasing the amount of the required surety to up to five times the standard amount.
- Prohibits DEP from issuing a permit to drill a gas or oil well if the applicant has not provided notice of the permit application to the governing authority of the county or municipality where the activity is proposed. DEP must consider matters raised in comments timely submitted by a municipality when evaluating an oil and gas activities permit application.
- Requires DEP to adopt rules for high-pressure well stimulation based on the study required by the bill. The rules may not go into effect until the study has been submitted to the Legislature and the rules are ratified by the Legislature. DEP must adopt the rules by March 1, 2018.
- Requires DEP to consider whether an application to perform high-pressure well stimulation will not contaminate groundwater near the well.
- Expands the scope of the high-pressure well stimulation study to include:
  - Potential groundwater contamination near wells that have been previously plugged and abandoned;
  - Potential direct and indirect economic benefits of high-pressure well stimulation;
  - Potential seismic activity associated with high-pressure well stimulation and deep-well disposal of oil and gas production wastewater; and
  - The feasibility and impact of waterless fracking to perform high-pressure well stimulation.

This analysis is drawn to the committee substitute reported favorably by the State Affairs Committee.