<table>
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<tr>
<th>Tab 1</th>
<th>SB 532 by Galvano (CO-INTRODUCERS) Stewart, Benacquisto, Rouson, Book, Young; (Similar to H 01065) Public Notification of Pollution</th>
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<tr>
<td></td>
<td>453416 A S RCS EP, Galvano Delete L.45: 03/09 09:32 AM</td>
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<td></td>
<td>477632 A S WD EP, Latvala Delete L.61 - 141: 03/09 09:32 AM</td>
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<tr>
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<td>883586 A S RCS EP, Galvano Delete L.61 - 141: 03/09 09:32 AM</td>
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<th>Tab 2</th>
<th>SB 442 by Young (CO-INTRODUCERS) Perry, Farmer, Latvala, Stewart, Rader, Flores, Mayfield, Steube, Rodriguez, Torres, Bracy, Campbell, Rouson, Book, Montford; (Identical to H 00451) Advanced Well Stimulation Treatment</th>
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**MEETING DATE:** Tuesday, March 7, 2017  
**TIME:** 4:00—6:00 p.m.  
**PLACE:** Mallory Horne Committee Room, 37 Senate Office Building  
**MEMBERS:** Senator Book, Chair; Senator Bradley, Vice Chair; Senators Farmer, Hutson, Latvala, Simmons, and Stewart

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<tr>
<th>TAB</th>
<th>BILL NO. and INTRODUCER</th>
<th>BILL DESCRIPTION and SENATE COMMITTEE ACTIONS</th>
<th>COMMITTEE ACTION</th>
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| 1   | SB 532                  | Public Notification of Pollution; Creating the "Public Notice of Pollution Act"; specifying authority of the Department of Environmental Protection; specifying that the act does not alter or affect the emergency management responsibilities of certain other governmental entities; requiring the department to establish and publish the types and amounts of a substance that, if released, would constitute a reportable release; specifying that providing a notice does not constitute an admission of liability or harm, etc. | Favorable  
Fav/CS  
Yeas 5 Nays 0 |
|     | Galvano                 | (Similar H 1065)                               | EP  
AEN  
AP  
03/07/2017 Favorable |
| 2   | SB 442                  | Advanced Well Stimulation Treatment; Prohibiting the performance of advanced well stimulation treatments; clarifying that permits for drilling or operating a well do not authorize the performance of advanced well stimulation treatments, etc. | Favorable  
Yeas 5 Nays 0 |
|     | Young                   | (Similar S 98, Identical H 451, Compare H 35, SJR 108) | EP  
AEN  
AP  
03/07/2017 Favorable |

Other Related Meeting Documents
I. Summary:

CS/SB 532 creates the Public Notice of Pollution Act. The bill defines a reportable pollution release as a release to the air, land, or water that is discovered by the owner or operator of an installation, is not authorized by law, and is:

- Reportable to the State Watch Office;
- Reportable to the Department of Environmental Protection (DEP) or a contracted county pursuant to rules governing storage tank systems;
- Reportable to DEP pursuant to rules governing underground injection control systems;
- A hazardous substance; or
- An extremely hazardous substance.

The owner or operator of any installation where a reportable pollution release occurs must provide a notice of the release to DEP. The notice must be submitted to DEP within 24 hours after discovery of the reportable pollution release and must contain detailed information described in the bill about the installation, the substance, and the circumstances surrounding the release. The bill also requires additional notice to DEP if a release migrates outside the property boundaries of the installation.

The bill requires DEP to publish each notice to the Internet within 24 hours after DEP receives it. DEP must also create a system for electronic mailing that allows interested parties to subscribe to and receive direct announcements of notices received by DEP. DEP must establish an email
address and an online form so that installation owners and operators are able to submit a notice of a reportable pollution release electronically. The bill provides that submitting a notice of a reportable pollution release does not constitute an admission of liability or harm. Finally, the bill provides for $10,000 per day in civil penalties for violations of these notice requirements and authorizes DEP to adopt rules to administer these provisions.

II. Present Situation:

Public Notice

Many commercial, industrial, agricultural, and utility operations and entities are required to report various releases, discharges, or emissions as a condition of permitted operations or pursuant to law or rule. Under state law, to the extent notification is required, it typically must be made to the Department of Environmental Protection (DEP). In some cases, notice to DEP is provided to the State Watch Office, an emergency communications center in the Division of Emergency Management. The State Watch Office, also known as the State Warning Point, serves as Florida’s primary point of contact for a wide variety of both natural and man-made emergencies. It serves as the contact point in Florida for communications between local governments and emergency agencies of both the state and federal governments and also provides emergency information to newspapers and radio and television stations. Examples of notification to the State Watch Office include DEP rule requirements for notification of petroleum discharges, wastewater discharges, and releases of hazardous substances, and a DEP statutory and rule requirement for notification of a discharge of drycleaning solvents. Requirements to notify the State Watch Office may also appear in DEP orders, permits, or variances, if required or authorized.

Notifications directly to DEP or a county under contract with DEP to perform compliance verification activities are required for certain releases or discharges of pollutants, including petroleum products, pesticides, ammonia, chlorine, hazardous substances, and specified mineral acids from underground or aboveground storage tanks. Notification is also required to be made to DEP of any noncompliance with an underground injection control permit that may endanger health or the environment. Requirements for notifications of the release of hazardous substances in DEP rule define “hazardous substance” and “extremely hazardous substance” by referencing definitions in federal regulations. Those federal regulations contain extensive lists of substances defined as hazardous substances and extremely hazardous substances. In certain circumstances,

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6 Section 376.3078(9)(c) and Fla Admin. Code R. 62-780.210(2).
10 40 C.F.R. s. 302.4 and 40 C.F.R. part 355, Appendices A and B.
statutes and rules require the owner or operator of an installation to directly notify a local government or the public of actions taken or conditions or occurrences at installations.\textsuperscript{11}

At present, there is no comprehensive notice requirement that all releases of substances be reported under state law. There is also no requirement in current law that all such reporting be accessible to the public.

**Public Notice Rule**

In response to recent pollution incidents, DEP initiated rulemaking in 2016 to establish a requirement for notification of releases of pollution from installations throughout the state. On September 27, 2016, DEP published an emergency rule. The following day, DEP published a notice of proposed rule with the same language. The emergency rule was in effect during the development of the proposed rule. The proposed rule would have:

- Required owners and operators of installations\textsuperscript{12} to provide a notification of pollution within 24 hours of the incident resulting in the pollution or the discovery of the pollution to:
  - DEP;
  - Local government officials; and
  - The general public.\textsuperscript{13} Notification to the general public under the proposed rule would have required an owner or operator to provide notice of the pollution to local broadcast television affiliates and a newspaper of general circulation in the area of the contamination.
- Required further notifications by owners and operators of installations on the status of the pollution.
- Provided that failure to give a notification of pollution subjected an owner or operator to statutory penalties of up to $10,000 per day.\textsuperscript{14}

Following publication of the proposed rule, DEP received three written proposals for a lower cost regulatory alternative (LCRA) to the rule. DEP prepared a statement of estimated regulatory costs (SERC) for the rule in response to the proposed LCRAs, as required by s. 120.541(1), F.S.\textsuperscript{15} In the SERC, DEP estimated regulatory costs of $182,000 per year, a calculation based on the number of notifications made under the newly-minted emergency rule. The LCRAs proposed that the rule be altered to require DEP to provide notification to local government officials and the general public and that notification requirements under the rule be loosened. DEP rejected the proposals because it determined that installations in compliance with law would have no costs under the rule and other proposals were inconsistent with the intent of the rule.\textsuperscript{16}


\textsuperscript{12}An installation is defined in s. 403.031(4), F.S., as “any structure, equipment, or facility, or appurtenances thereto, or operation which may emit air or water contaminants in quantities prohibited by rules of the department.”

\textsuperscript{13}Proposed Rule 62-4.161, Florida Administrative Register Vol. 42/No. 189.

\textsuperscript{14}Id.


\textsuperscript{16}Id.
A notice of change for the proposed rule was published on November 15, 2016. In the change notice, DEP altered the proposed rule by expanding and clarifying the operation of the notice requirement. DEP added the following:

- An intent section.
- A reportable release as the trigger for the requirement to provide notice; reportable release defined in the rule as a release of a substance not authorized by law which is discovered by an owner or operator after the effective date of the rule and which is:
  - Reportable to the State Watch Office or to DEP or a county administering a DEP program under certain rules; or
  - A hazardous or extremely hazardous substance at or above quantities established in certain federal regulations.
- Specific information that must be contained in the notice and the manner the notice must be submitted to various parties.
- Language providing that as long as one party provides notice in compliance with the rule, then other parties are not required to provide notice for the same reportable release.  

Rule Challenge

On November 18, 2016, several commercial associations filed an administrative challenge to the proposed rule in Associated Industries of Florida, Inc. et al. v. Department of Environmental Protection. The petitioners argued that the rule violated statutory requirements and was invalid on four grounds:

- DEP materially failed to follow the applicable rulemaking procedures and requirements;
- DEP exceeded its grant of rulemaking authority;
- The proposed rule enlarges, modifies, or contravenes the specific provisions of law implemented; and
- The proposed rule imposes regulatory costs on the regulated person, county, or city which could be reduced by the adoption of less costly alternatives that substantially accomplish the statutory objectives.

On December 30, 2016, the administrative law judge (ALJ) entered a final order, holding that DEP lacked the rulemaking authority for the proposed rule. The final order concluded that the authorities cited by DEP as providing it with the statutory authority to adopt the rule are general grants of authority and not specific enough to authorize DEP to require that owners and operators of installations provide notices to local governments, the general public, and broadcast media. The ALJ also found that the proposed rule enlarges the provisions of law implemented because the statutory provisions cited by DEP did not contain specific language regarding reporting requirements for the release of contaminants. The ALJ concluded that the proposed rule was an invalid exercise of delegated legislative authority, affirming the petitioners’ grounds for

18 Case No. 16-6889RP ( Fla. DOAH 2016).
19 Section 120.52(8), F.S.
challenging the rule. The ALJ did not evaluate the issue of whether the LCRAs were properly rejected by DEP because he deemed the rule invalid on other grounds.

DEP has not appealed the final order. The rule, therefore, is invalid because there is insufficient statutory authority for DEP to adopt this notice of pollution requirement by rule. Immediately following the invalidation of DEP’s proposed rule, the department began providing links on its website regarding notices of releases it receives from permitted and non-permitted facilities throughout the state. DEP continues to maintain an email list for those who want to subscribe to notices of pollution releases. Upon its receipt of a notice of pollution from an installation, DEP sends it to email list subscribers, local governments, and media outlets, fulfilling the function the proposed rule had required of owners and operators of installations for the subset of all releases that are required to be reported to DEP under current law.

III. **Effect of Proposed Changes:**

CS/SB 532 creates the Public Notice of Pollution Act.

The bill sets forth goals and findings related to notifying the public about reportable releases. It defines a reportable pollution release as a release to the air, land, or water that is discovered by the owner or operator of an installation, is not authorized by law, and is:

- Reportable to the State Watch Office pursuant to DEP rule, permit, order, or variance;
- Reportable to DEP or a contracted county pursuant to rules governing storage tank systems;
- Reportable to DEP pursuant to rules requiring notice for noncompliance from underground injection control systems where such noncompliance:
  - May endanger public health or the environment; and
  - Has the potential to contaminate potable water wells outside the property boundaries of the installation;
- A hazardous substance as defined in statute at or above quantities established in Federal Regulations; or
- An extremely hazardous substance as defined in Federal Regulations.

The bill requires the owner or operator of an installation at which a reportable pollution release occurs to provide a notice to DEP within 24 hours after discovery of a reportable pollution release. The notice must include:

- The name and address of the installation where the reportable pollution release occurred.
- The name and title of the reporting person and the nature of his or her relationship to the installation.
- The identification number for any active DEP permits, variances, registrations, or orders that are relevant to the reportable pollution release.
- The name and telephone number of a contact person for further information.

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21 Id. at 16.
22 Id. at 18.
23 DEP, *Notice of an Incident or Discovery of Pollution*, http://dep.state.fl.us/pollutionnotice/ (last visited March 5, 2017).
24 DEP, *Notice of an Incident or Discovery of Pollution*, http://lists.dep.state.fl.us/mailman/listinfo/pollution.notice (last visited March 5, 2017).
25 DEP, *Notice of an Incident or Discovery of Pollution*, http://lists.dep.state.fl.us/pipermail/pollution.notice/ (last visited March 5, 2017).
• The substance released.
• The estimated quantity of the substance released and, if applicable, the estimated quantity that has since been recovered.
• The cause of the release.
• The source of the release.
• The location of the release.
• The date, time, and duration of the release.
• The medium into which the substance was released, such as, but not limited to, the outdoor air, land, groundwater, aquifer, or specified waters or wetlands.
• Whether the released substance has migrated to land or waters of the state outside the property boundaries of the installation and the location of such migration.
• To the extent available, toxicological information associated with the substance released as specified on a safety data sheet or comparable source published by the Occupational Safety and Health Administration or the Centers for Disease Control and Prevention, or their successor agencies.
• Other information to assist in the protection of the public health, safety, and welfare, at the discretion of the owner or operator.

The bill also requires that an additional notice be provided to DEP if, after submitting the initial notice, the owner or operator determines that a release has migrated outside the property boundaries of the installation. Such additional notice must be given within 24 hours of discovery of the migration and must provide all of the information required in an initial notice and specify the extent of the migration.

A notification of a reportable pollution release made by a party in accordance with statutory requirements constitutes compliance on behalf of all parties subject to the notice requirement for that reportable pollution release. However, if the notification is not made in accordance with statutory requirements, DEP may pursue enforcement against all parties subject to the notice requirement. After providing a notice of a reportable pollution release, an installation owner or operator may submit a letter to DEP documenting additional information if an amendment to the notice is warranted or the owner or operator has determined that a reportable pollution release did not, in fact, occur.

DEP must publish, on a website accessible to the public, all notices submitted by an owner or operator within 24 hours of receipt by the department. DEP must also create an electronic mailing list for notices and allow the public, including local governments, health departments, news media, and other interested persons, to subscribe to and receive periodic direct announcements of any reportable pollution release notices submitted. DEP must establish regional electronic mailing lists, such as by county or district boundaries, to allow subscribers to determine the notices they wish to receive by geographic area. DEP must also establish an e-mail address and an online form as options for owners and operators to provide notices of reportable pollution release.

The bill provides that a reportable pollution release notice provided by an owner or operator to DEP does not constitute an admission of liability or harm. It also provides that the owner or operator of an installation is subject to civil penalties of up to $10,000 per day for each day the
owner or operator is in violation of the requirement to provide notification of a reportable pollution release. The bill authorizes DEP to adopt rules to administer these provisions.

The bill takes effect July 1, 2017.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

The county/municipality mandates provision of Art. VII, section 18, of the Florida Constitution may apply because this bill may require certain local governments to spend money or take action that requires the expenditures of money. If so, the insignificant fiscal impact exemption to the mandates provision likely applies. Costs to local governments for gathering and reporting information regarding reportable pollution releases within 24 hours of discovery may have an insignificant fiscal impact.

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:

Owners and operators of installations which use, produce, or contain substances listed by DEP will likely incur some costs for gathering and reporting information regarding reportable pollution releases within 24 hours of discovery.

C. Government Sector Impact:

Installations owned or operated by governmental entities, including local governments, will likely incur some costs for gathering and reporting information regarding reportable pollution releases within 24 hours of discovery.

DEP also will likely incur some costs in promulgating rules to administer the provisions of the bill and in developing the website and electronic mailing lists required by the bill.

VI. Technical Deficiencies:

None.
VII. Related Issues:

None.

VIII. Statutes Affected:

This bill amends section 403.121 of the Florida Statutes.

This bill creates sections 403.076, 403.077, and 403.078 of the Florida Statutes.

IX. Additional Information:

A. Committee Substitute – Statement of Substantial Changes:

(Summarizing differences between the Committee Substitute and the prior version of the bill.)

CS by Environmental Preservation and Conservation on March 7, 2017:

- Makes a technical change to add land to components of nature of which DEP has the authority and duty to control and prohibit pollution.

- Changes the definition of releases that must be reported by eliminating the requirement that DEP determine the releases by establishing and publishing a list of substances that present an immediate and substantial risk to the public health, safety, or welfare at or above specified quantities determined by DEP. Instead, the CS provides that a reportable pollution release is a release to the air, land, or water that is discovered by the owner or operator of an installation, is not authorized by law, and is:
  - Reportable to the State Watch Office;
  - Reportable to DEP or a contracted county pursuant to rules governing storage tank systems;
  - Reportable to DEP pursuant to rules governing underground injection control systems;
  - A hazardous substance as defined in statute at or above quantities established in Federal Regulations; or
  - An extremely hazardous substance as defined in Federal Regulations.

- Requires additional notice to DEP if, after providing the initial notice, the owner or operator determines that a release has migrated outside the property boundaries of the installation. Such additional notice must be given within 24 hours of discovery of the migration and must provide all of the information required in an initial notice and specify the extent of the migration.

B. Amendments:

None.

This Senate Bill Analysis does not reflect the intent or official position of the bill’s introducer or the Florida Senate.
The Committee on Environmental Preservation and Conservation (Galvano) recommended the following:

**Senate Amendment**

1. Delete line 45 and insert:

   control and prohibit pollution of the air, land, and water of this
The Committee on Environmental Preservation and Conservation (Latvala) recommended the following:

**Senate Amendment (with title amendment)**

Delete lines 61 - 141 and insert:

"reportable release" means the release or discharge of pollution which is not authorized by law and is required to be reported to the State Watch Office.

(2) OWNER AND OPERATOR RESPONSIBILITIES.—

(a) In the event of a reportable release, any person who is an owner or operator of the installation at which the reportable
release occurred must provide a notice with the following information, to the extent known at the time of such notice, to the department within 24 hours after its discovery:

1. The name and address of the installation where the reportable release occurred.

2. The name and title of the reporting person and the nature of his or her relationship to the installation.

3. The identification number for any active department permits, variances, registrations, or orders that are relevant to the reportable release.

4. The name and telephone number of a contact person for further information.

5. The substance released.

6. The estimated quantity of the substance released and, if applicable, the estimated quantity that has since been recovered.

7. The cause of the release.

8. The source of the release.

9. The location of the release.

10. The date, time, and duration of the release.

11. The medium into which the substance was released, such as, but not limited to, the outdoor air, land, groundwater, aquifer, or specified waters or wetlands.

12. Whether the released substance has migrated to land or waters of the state outside the property boundaries of the installation and the location of such migration.

13. To the extent available, toxicological information associated with the substance released as specified on a safety data sheet or comparable source published by the Occupational Health and Safety Administration.
Safety and Health Administration or the Centers for Disease Control and Prevention, or their successor agencies.

The owner or operator may also include in the notice any other information he or she wishes in order to assist in the protection of the public health, safety, and welfare.

(b) If multiple parties are subject to the notification requirements based on a single reportable release, a single notification made by one party in accordance with this section constitutes compliance on behalf of all parties subject to the requirement. However, if the notification is not made in accordance with this section, the department may pursue enforcement against all parties subject to the requirement.

(c) If the installation owner or operator determines, after providing notice pursuant to paragraph (a), that a reportable release did not occur or that an amendment to the notice is warranted, the installation owner or operator may submit a letter to the department documenting such determination.

(3) DEPARTMENTAL RESPONSIBILITIES.—

(a) The department shall publish, on a website accessible to the public, all notices submitted by an owner or operator pursuant to subsection (2) within 24 hours of receipt.

(b) The department shall create an electronic mailing list for such notices and allow the public, including local governments, health departments, news media, and other interested persons, to subscribe to and receive periodic direct announcement of any notices submitted pursuant to subsection (2). The department shall establish regional electronic mailing lists, such as by county or district boundaries, to allow
subscribers to determine the notices they wish to receive by geographic area.

(c) The department shall establish an e-mail address and an online form as options for owners and operators to provide the notice specified in paragraphs (2)(a) and (b).

(4) ADMISSION OF LIABILITY OR HARM.—Providing notice under subsection (2) does not constitute an admission of liability or harm.

(5) VIOLATIONS.—For failure to provide the notification required by paragraph (2)(a), the owner or operator shall be subject to the civil penalties specified in s. 403.121.

(6) ADOPTION OF RULES.—The department shall adopt rules

================ T I T L E A M E N D M E N T =================

And the title is amended as follows:

Delete lines 10 - 13

and insert:

defining the term “reportable release”; requiring an owner or
The Committee on Environmental Preservation and Conservation (Galvano) recommended the following:

**Senate Amendment (with title amendment)**

Delete lines 61 - 141

and insert:

“reportable pollution release” means the release or discharge of a substance from an installation to the air, land, or waters of the state which is discovered by the owner or operator of the installation, which is not authorized by law, and which is:

(a) Reportable to the State Watch Office within the Division of Emergency Management pursuant to department rules,
permit, order, or variance;

(b) Reportable to the department or a contracted county pursuant to department rules governing storage tank systems under ss. 376.303, 376.321, and 376.322;

(c) Reportable to the department pursuant to department rules requiring notice for noncompliance from underground injection control systems where such noncompliance may endanger public health or the environment and has the potential to contaminate potable water wells outside the property boundaries of the installation;

(d) A hazardous substance at or above the quantity established in Table 302.4 of 40 C.F.R. s. 302.4, revised as of July 1, 2016, for such substance, for which notification is required by 40 C.F.R. s. 302.6; or

(e) An extremely hazardous substance pursuant to 40 C.F.R. s. 355.61, at or above the quantity established in Appendices A and B of 40 C.F.R. part 355, revised as of July 1, 2016, for such substance, for which notice is required by 40 C.F.R. s. 355.33.

(2) OWNER AND OPERATOR RESPONSIBILITIES.—

(a) In the event of a reportable pollution release, any person who is an owner or operator of the installation at which the reportable pollution release occurred must provide a notice containing the following information, to the extent known at the time of such notice, to the department within 24 hours after its discovery:

1. The name and address of the installation where the reportable pollution release occurred.

2. The name and title of the reporting person and the
nature of his or her relationship to the installation.

3. The identification numbers for any active department permits, variances, registrations, or orders that are relevant to the reportable pollution release.

4. The name and telephone number of a contact person for further information.

5. The substance released.

6. The estimated quantity of the substance released and, if applicable, the estimated quantity that has since been recovered.

7. The cause of the release.

8. The source of the release.

9. The location of the release.

10. The date, time, and duration of the release.

11. The medium into which the substance was released, including, but not limited to, the outdoor air, land, groundwater, aquifer, or specified waters or wetlands.

12. Whether the released substance has migrated to land or waters of the state outside the property boundaries of the installation and the location of such migration.

13. To the extent available, toxicological information associated with the substance released as specified on a safety data sheet or comparable source published by the Occupational Safety and Health Administration or the Centers for Disease Control and Prevention, or their successor agencies.

The owner or operator may also include in the notice any other information he or she wishes in order to assist in the protection of the public health, safety, and welfare.
(b) If multiple parties are subject to the notification requirements based on a single reportable pollution release, a single notification made by one party in accordance with this section constitutes compliance on behalf of all parties subject to the requirement. However, if the notification is not made in accordance with this section, the department may pursue enforcement against all parties subject to the requirement.

(c) If, after providing notice pursuant to paragraph (a), the installation owner or operator determines that a reportable pollution release did not occur or that an amendment to the notice is warranted, the installation owner or operator may submit a letter to the department documenting such determination.

(d) If, after providing notice under paragraph (a), the installation owner or operator determines that a release subject to the noticing requirements of this act has migrated outside the property boundaries of the installation, the owner or operator, within 24 hours after such discovery, must provide an additional notice to the department. Such notice must comply with the requirements of paragraph (a) and specify the extent of the migration outside the property boundaries.

(3) DEPARTMENTAL RESPONSIBILITIES.—

(a) The department shall publish on a website accessible to the public all notices submitted by an owner or operator pursuant to subsection (2) within 24 hours of receipt.
announcement of any notices submitted pursuant to subsection (2). The department shall establish regional electronic mailing lists, such as by county or district boundaries, to allow subscribers to determine the notices they wish to receive by geographic area.

(c) The department shall establish an e-mail address and an online form as options for owners and operators to provide the notice specified in paragraphs (2)(a) and (b).

(4) ADMISSION OF LIABILITY OR HARM.—Providing notice under subsection (2) does not constitute an admission of liability or harm.

(5) VIOLATIONS.—For failure to provide the notification required by paragraphs (2)(a) or (2)(d), the owner or operator shall be subject to the civil penalties specified in s. 403.121.

(6) ADOPTION OF RULES.—The department shall adopt rules defining the term “reportable pollution release”; requiring an owner or operator of an installation at which a reportable pollution release occurred to provide certain information to the department within 24 hours after the discovery of a reportable pollution release; authorizing the owner or operator to amend such notice; specifying compliance and enforcement requirements; requiring owners or operators to provide notice when a reportable pollution release migrates...
outside the property boundaries of the installation; requiring the department to
By Senator Galvano

A bill to be entitled
An act relating to public notification of pollution;
creating s. 403.076, F.S.; providing a short title;
creating s. 403.077, F.S.; providing goals and
legislative findings; specifying authority of the
Department of Environmental Protection; specifying
that the act does not alter or affect the emergency
management responsibilities of certain other
governmental entities; creating s. 403.078, F.S.;
defining the term “reportable release”; requiring the
department to establish and publish the types and
amounts of a substance that, if released, would
constitute a reportable release; requiring an owner or
operator of an installation at which a reportable
release occurred to provide certain information to the
department within 24 hours after the discovery of a
reportable release; authorizing the owner or operator
to amend such notice; specifying compliance and
enforcement requirements; requiring the department to
publish such information in a specified manner;
requiring the department to establish an electronic
mailing list; requiring the department to provide a
reporting form and e-mail address for such notice;
specifying that providing a notice does not constitute
an admission of liability or harm; specifying
penalties for violations; requiring the department to
adopt rules; amending s. 403.121, F.S.; specifying
penalties for failure to provide required notice;
providing an effective date.

Be It Enacted by the Legislature of the State of Florida:
Section 1. Section 403.076, Florida Statutes, is created to read:

403.076 Short title.—Sections 403.076-403.078 may be cited as the “Public Notice of Pollution Act.”

Section 2. Section 403.077, Florida Statutes, is created to read:

403.077 Public notice of pollution; goals and findings.—
(1) It is a goal of the state that the public be timely notified of a discovered, reportable pollution release that may pose an immediate danger to the public health, safety, or welfare.

(2) The department has the authority and the duty to control and prohibit pollution of the air and water of this state and has the primary responsibility to ensure that the public is aware of reportable pollution releases. Alerting the department about reportable pollution releases, within the timeframes and in the manner provided by this act, will better inform the department and the public regarding such releases and the need, if any, to take action to protect the public health, safety, and welfare.

(3) This act does not alter or affect the emergency management responsibilities of the Governor, the Division of Emergency Management, or the governing body of any political subdivision of the state pursuant to chapter 252.

Section 3. Section 403.078, Florida Statutes, is created to read:

403.078 Public notification of pollution.—
(1) DEFINITION.—As used in this section, the term “reportable release” means the release of a substance at or
above the quantity specified by the department in subsection (2).

(2) DEPARTMENT DETERMINATION OF REPORTABLE RELEASE.—The department shall establish and publish a list of substances that, at a specified quantity determined by the department, present an immediate and substantial risk to the public health, safety, or welfare.

(3) OWNER AND OPERATOR RESPONSIBILITIES.—

(a) In the event of a reportable release, any person who is an owner or operator of the installation at which the reportable release occurred must provide a notice with the following information, to the extent known at the time of such notice, to the department within 24 hours after its discovery:

1. The name and address of the installation where the reportable release occurred.

2. The name and title of the reporting person and the nature of his or her relationship to the installation.

3. The identification number for any active department permits, variances, registrations, or orders that are relevant to the reportable release.

4. The name and telephone number of a contact person for further information.

5. The substance released.

6. The estimated quantity of the substance released and, if applicable, the estimated quantity that has since been recovered.

7. The cause of the release.

8. The source of the release.

9. The location of the release.
10. The date, time, and duration of the release.
11. The medium into which the substance was released, such as, but not limited to, the outdoor air, land, groundwater, aquifer, or specified waters or wetlands.
12. Whether the released substance has migrated to land or waters of the state outside the property boundaries of the installation and the location of such migration.
13. To the extent available, toxicological information associated with the substance released as specified on a safety data sheet or comparable source published by the Occupational Safety and Health Administration or the Centers for Disease Control and Prevention, or their successor agencies.

The owner or operator may also include in the notice any other information he or she wishes in order to assist in the protection of the public health, safety, and welfare.

(b) If multiple parties are subject to the notification requirements based on a single reportable release, a single notification made by one party in accordance with this section constitutes compliance on behalf of all parties subject to the requirement. However, if the notification is not made in accordance with this section, the department may pursue enforcement against all parties subject to the requirement.

(c) If the installation owner or operator determines, after providing notice pursuant to paragraph (a), that a reportable release did not occur or that an amendment to the notice is warranted, the installation owner or operator may submit a letter to the department documenting such determination.

(4) DEPARTMENTAL RESPONSIBILITIES.—
(a) The department shall publish, on a website accessible to the public, all notices submitted by an owner or operator pursuant to subsection (3) within 24 hours of receipt.

(b) The department shall create an electronic mailing list for such notices and allow the public, including local governments, health departments, news media, and other interested persons, to subscribe to and receive periodic direct announcement of any notices submitted pursuant to subsection (3). The department shall establish regional electronic mailing lists, such as by county or district boundaries, to allow subscribers to determine the notices they wish to receive by geographic area.

(c) The department shall establish an e-mail address and an online form as options for owners and operators to provide the notice specified in paragraphs (3)(a) and (b).

5. ADMISSION OF LIABILITY OR HARM.—Providing notice under subsection (3) does not constitute an admission of liability or harm.

6. VIOLATIONS.—For failure to provide the notification required by paragraph (3)(a), the owner or operator shall be subject to the civil penalties specified in s. 403.121.

7. ADOPTION OF RULES.—The department shall adopt rules necessary to administer the provisions of this section.

Section 4. Present paragraph (f) of subsection (4) of section 403.121, Florida Statutes, is redesignated as paragraph (g), and a new paragraph (f) is added to that subsection, to read:

403.121 Enforcement; procedure; remedies.—The department shall have the following judicial and administrative remedies
available to it for violations of this chapter, as specified in s. 403.161(1).

(4) In an administrative proceeding, in addition to the penalties that may be assessed under subsection (3), the department shall assess administrative penalties according to the following schedule:

(f) For failure to provide required notice pursuant to s. 403.078, up to $10,000 per day for each day an installation owner or operator is in violation of the section.

Section 5. This act shall take effect July 1, 2017.
I. Summary:

SB 442 prohibits the performance of advanced well stimulation treatments on oil or gas wells. The bill defines the term “advanced well stimulation treatment” to include all stages of well intervention performed by injecting fluids into a rock formation:

- At pressure that is at or exceeds the fracture gradient of the rock formation and the purpose or effect is to fracture the formation to increase production or recovery from an oil or gas well, such as hydraulic fracturing or acid fracturing; or
- At pressure below the fracture gradient of the rock formation and the purpose or effect is to dissolve the formation to increase production or recovery from an oil or gas well, such as matrix acidizing.

The definition explicitly excludes techniques used for routine well cleanout work, well maintenance, or removal of formation damage due to drilling or production; or acidizing techniques used to maintain or restore the natural permeability of the formation near the wellbore.

II. Present Situation:

Production of conventional versus unconventional oil and gas resources: the use of well stimulation techniques

Conventional oil and gas resources are found in permeable sandstone and carbonate reservoirs. Wells have historically been drilled vertically, straight down into a rock formation to extract conventional resources. Whereas conventional resources are found in concentrated underground locations, unconventional resources are highly dispersed through impermeable or “tight” rock

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formations such as shales and tight sands. To extract unconventional resources, drilling has shifted from vertical to horizontal or directional away from the reservoir and toward the source rock.

Well stimulation techniques are used in the production of both conventional and unconventional resources. The techniques can be focused solely on the wellbore for maintenance and remedial purposes or can be used to increase production from the reservoir. The relatively recent development horizontal or directional drilling in conjunction with the expanded use of well stimulation techniques has increased the production at oil or gas wells and has led to the profitable extraction of unconventional resources. The three main well stimulation techniques are hydraulic fracturing, acid fracturing, and matrix acidizing.

Hydraulic Fracturing

Hydraulic fracturing was developed in the 1940s to increase the production of conventional oil and gas resources. While the technique is not new, the composition of the fracturing fluids used in the process has evolved over time. Initially the fracturing fluids were oil-based and relied on a mixture of petroleum compounds, such as napalm and diesel fuels. Modern hydraulic fracturing involves a fracturing fluid that is composed of a base fluid, in most cases water; additives, each designed to serve a particular function; and a proppant, such as sand. The composition of the fracturing fluid varies depending on the permeability and brittleness of the reservoir rock. A hydraulic fracturing operation at a horizontal well involves four stages. The first is the “stage,” during which a portion of the well is isolated to focus the fracture fluid pressure. The second is the “pad,” during which fracture fluid is injected without proppant to initiate and propagate the fracture. The proppant is then added to keep the fractures open. The third stage is the “flush,” during which fluid is injected without proppant to push any remaining proppant into the fractures. The fourth state is the “flowback,” during which the hydraulic fracturing fluids are removed and the fluid pressure dissipates.

The Environmental Protection Agency (EPA) estimates that 25,000-30,000 new wells were drilled and hydraulically fractured annually in the United States between 2011 and 2014. In the U.S., hydraulically fractured oil and gas production wells accounted for approximately 50 percent of oil production and approximately 70 percent of gas production in 2015. Hydraulic fracturing...
fracturing in conjunction with horizontal or directional drilling techniques has led to a surge in domestic production of oil and gas resources in the last decade and, in 2012, the United States became the world’s top producer of petroleum and natural gas hydrocarbons. Following a decline in prices, the number of new hydraulically fractured wells in 2015 decreased to 20,000, but despite this decline, U.S. oil and gas production continues at levels above those in previous decades.

**Acid Fracturing**

Well stimulation techniques that use acid-based formulas are sometimes preferred in carbonate reservoirs. Acid fracturing is a well stimulation technique that uses acidic fluids. Well operators pump the acidic fluids into a well at a pressure that exceeds the fracture gradient and, thus, fractures the rock. The acid etches the walls of the fracture and eliminates the need to use a proppant because the fractures remain open after pressure is released. The produced fluids have a much lower acid content than the injected fluids because most of the acid that is injected is neutralized through a reaction with the rock. As compared to hydraulic fracturing, acid fracturing is generally more successful in carbonate reservoirs because of the relatively high degree of natural fractures present.

The purpose of an acid fracturing treatment is to create new or open existing fractures and dissolve formation material to create an irregular fracture surface that opens up new flow paths or enhances existing flow paths into the wellbore. As compared to hydraulic fracturing, acid fracturing results in fractures that are relatively short in length. One of the main factors that adversely affects acid fracture growth is fluid loss or acid leakoff. Acid leakoff can result in the enlargement of wormholes and natural fractures and can greatly increase the area from which fluid loss occurs, making fluid-loss control difficult and preventing acid from reaching untreated parts of the fracture.

**Matrix Acidizing**

Dating back to 1895, well operators have been using matrix acidizing for over 100 years. Drilling and production operations lead to formation damage. Formation damage can include the plugging of perforations or the plugging of the rock matrix by debris from the well and well

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11 EPA Study at 3-1.
12 CA Study at 56.
13 Id. at 28.
14 Id. at 14.
15 Id. at 56.
17 CA Study at 56.
19 CA Study at 69.
operations which restricts the flow of hydrocarbons into the wellbore. Matrix acidizing is performed by pumping acidic fluids into a well at a pressure that does not exceed the fracture gradient. Acidizing is often used for well maintenance and to remediate damage caused by well operation and drilling. Operators use acid, which is very effective at dissolving carbonate minerals, to bypass formation damage around the well. The acid is mostly neutralized because it reacts quickly with the limestone. This technique is also commonly used to clean water well systems to remove mineral deposits from the well screen, gravel pack, and the immediate formation.

If large volumes of acid are injected into carbonate formations, matrix acidizing can be used to increase the permeability of the formation beyond the zone impacted by drilling or production activities. Matrix acidizing can result in limited stimulation of carbonate reservoir permeability beyond the near-wellbore region. This technique is not commonly used for stimulation in unconventional reservoirs because it does not increase recovery enough in low permeability reservoirs to make production viable. The penetration into the formation caused by matrix acidizing is less extensive than after use of a fracturing technique. However, in carbonate reservoirs matrix acidizing can create deeply penetrating channels, known as wormholes, and lead to deeper acid penetration into more permeable fractures of a naturally fractured reservoir.

To minimize the probability of acid entering into highly permeable sections of the formation, which could create channels into water-producing zones, careful treatment, design, and execution is required when performing a matrix acidizing treatment.

Production of oil and gas resources in Florida

Northwest and South Florida are the major oil and gas producing areas in the state. The first producing oil well was discovered in 1943 at a wellsite located in the Big Cypress Preserve in South Florida. Oil and gas resources were first discovered in Northwest Florida in 1970. There are two active oil and gas fields in Northwest Florida in Escambia and Santa Rosa counties, and five active oil and gas fields in South Florida in Lee, Hendry, Collier, and Miami-Dade counties. While geologists believe that there may be large oil and natural gas deposits off Florida’s western coast, the state enacted a drilling ban for state waters in 1990 and, in 2006,
Congress banned the leasing of federal offshore blocks within 125 miles of Florida's western coast until at least 2022.\textsuperscript{33}

As of 2016, there were approximately 64 active producer wells in Florida.\textsuperscript{34} The Florida Department of Environmental Protection’s (FDEP) 2016 Annual Production Report totaled natural gas production at 773,444 million cubic feet and oil production at 618,809 thousand barrels in the state.\textsuperscript{35}

Proven oil and gas reserves both in Northwest and South Florida are composed of carbonate formations and reservoirs that have relatively high permeability.\textsuperscript{36} Rather than hydraulic fracturing, well operators in the state prefer washing or flushing the formations to open carbonate pathways to enhance recovery of oil and gas resources.\textsuperscript{37}

\section*{Regulation of well stimulation techniques}

\textbf{Federal}

There is limited direct federal regulation over oil and gas activities. In 2005, Congress passed the Energy Policy Act amending, in part, the Safe Drinking Water Act (SDWA) and the Clean Water Act (CWA).\textsuperscript{38} The SDWA was amended to revise the definition of the term “underground injection” to specifically exclude the underground injection of fluids or propping agents (other than diesel fuels) pursuant to hydraulic fracturing operations. The CWA was amended to characterize oil and gas exploration and production as “construction activities,” thereby removing these operations from the scope of the CWA.\textsuperscript{39} Thus, the Energy Policy Act effectively exempted non-diesel hydraulic fracturing from federal regulation.\textsuperscript{40}

In an attempt to regulate hydraulic fracturing on federal and tribal lands, the Bureau of Land Management (BLM) in March of 2015, published final rules governing hydraulic fracturing.\textsuperscript{41}

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\textsuperscript{33} EIA, Florida State Profile, \textit{Analysis: Petroleum}, \url{http://www.eia.gov/state/analysis.php?sid=FL} (last visited Feb. 23, 2017); see s. 377.242(1), F.S.
\textsuperscript{34} Florida Department of Environmental Protection (FDEP), \textit{Florida Oil and Gas Annual Production Reports} (2016), available at \url{http://www.dep.state.fl.us/water/mines/oil_gas/production.htm} (last visited Feb. 23, 2017).
\textsuperscript{35} \textit{Id.}
\textsuperscript{37} \textit{Id.}
\textsuperscript{39} The EPA rule implementing the CWA amendment was challenged and the Ninth Circuit Court of Appeals vacated the rule. Oil and gas construction facilities remain subject to stormwater permitting requirements, as well as, NPDES permit requirements; see William J. Brady, \textit{Hydraulic Fracturing Regulation in the United States: The Laissez-faire approach of the Federal government and varying state regulations}, 8 (Univ. of Denver Sturm College of Law), available at \url{http://www.law.du.edu/documents/faculty-highlights/Intersol-2012-HydroFracking.pdf} (last visited Feb. 23, 2017).
\textsuperscript{41} Under the final BLM regulations, the term “hydraulic fracturing” is defined as “those operations conducted in an individual wellbore designed to increase the flow of hydrocarbons from the rock formation to the wellbore through modifying the permeability of reservoir rock by applying fluids under pressure to fracture it. Hydraulic fracturing does not include enhanced
The rules were to take effect on June 24, 2015, however, the United States District Court for the District of Wyoming granted a preliminary injunction and the rule was stayed. In June of 2016, the court held that the BLM lacked authority to regulate hydraulic fracturing and set aside the final rules. The decision is on appeal and the case is pending.

While direct regulation over well stimulation techniques at the federal level is limited, there are several federal statutes that regulate the impacts of oil and gas extraction. The EPA’s Oil and Gas Extraction Effluent Guidelines and Standards regulate wastewater discharges from field exploration, drilling, production, well treatment, and well completion activities. The regulations apply to conventional and unconventional extraction with the exception of extractions of coalbed methane. These standards are incorporated into the National Pollutant Discharge Elimination System regulatory framework.

Because oil and gas activities may result in the release of hazardous substances into the environment at or under the surface in a manner that may endanger public health or the environment, these activities are regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). While recovered petroleum or natural gas is exempt from the act, other hazardous substances that result from oil or gas production, such as fracturing fluids, fall under the act. If a release of such fluids occurs, the facility owner and operator could face liability under CERCLA.

To ensure that employees who may be exposed to hazardous chemicals in the workplace are aware of the chemicals’ potential dangers, manufacturers and importers must obtain or develop Material Safety Data Sheets (MSDS) for hydraulic fracturing chemicals that are hazardous according to the Occupational Safety and Health Administration (OSHA) standards. MSDS sheets must be maintained for hazardous chemicals at each job site and must, at a minimum, include the chemical names of substances that are considered hazardous under OSHA regulations.

State

States have primary jurisdiction and authority over the regulation of oil and gas activities. Almost all states with economically viable production wells have extensive regulatory programs secondary recovery such as water flooding, tertiary recovery, recovery through steam injection, or other types of well stimulation operations such as acidizing.  

45 Id.  
46 Id.  
48 Id. at 13.  
49 Id. at 22.
in place for permitting and monitoring oil and gas activities. Recent advances in technology and the widespread use of well stimulation techniques, particularly hydraulic fracturing, have motivated some states to update and revise their oil and gas regulations to specifically address such techniques or to ban certain techniques altogether. In 2012, Vermont became the first state to ban hydraulic fracturing.

The Governor of New York in December of 2010 issued an executive order directing the New York State Department of Environmental Conservation (NDEC) to publish a revised Generic Environmental Impact Statement to consider if and under what conditions high-volume hydraulic fracturing should be allowed in the state of New York and which prohibited the issuance of permits to drill wells using such method until the statement was completed. The NDEC published its final findings statement in 2015, which concluded that there were “no feasible or prudent alternatives [other than a ban which] would adequately avoid or minimize adverse environmental impacts and that address the scientific uncertainties and risks to public health from [high-volume hydraulic fracturing.]” The NDEC’s Findings Statement effectively banned high-volume hydraulic fracturing in the state of New York.

In 2015, Maryland passed a two-year moratorium on hydraulic fracturing, which included a requirement that the Maryland Department of the Environment (MDE) adopt regulations for the hydraulic fracturing of a well for the exploration or production of natural gas. MDE proposed rules, including a suite of best practices to be followed for oil and gas exploration and production in Maryland, which are intended to protect public health, safety, natural resources, and the environment. The MDE published rules in November of 2016, and the rules are under review by the Maryland General Assembly’s Joint Committee on Administrative, Executive, and


51 29 V.S.A. § 571; 29 V.S.A. § 503, defines the “hydraulic fracturing” as “the process of pumping a fluid into or under the surface of the ground in order to create fractures in rock for the purpose of the production or recovery of oil or gas.”


53 NY Department of Environmental Conservation, Final Supplemental Generic Environmental Impact Statement on the Oil, Gas, and Solution Mining Regulatory Program: Regulatory Program for Horizontal Drilling and High-Volume Hydraulic Fracturing to Develop the Marcellus Shale and other Low-Permeability Gas Reservoirs, 42 (June 2015), available at http://www.dec.ny.gov/energy/75370.html (last visited Feb. 23, 2017); under New York law, the term “high-volume hydraulic fracturing” is defined as “the stimulation of a well using 300,000 or more gallons of water as the base fluid for hydraulic fracturing for all stages in a well completion, regardless of whether the well is vertical or directional, including horizontal.”

54 Maryland Code § 14-107.1; under Maryland law, the term “hydraulic fracturing” is defined as “a drilling technique that expands existing fractures or creates new fractures in rock by injecting fluids, often a mixture of water and chemicals, sand, or other substances, and often under pressure, into or underneath the surface of the rock for purposes that include well drilling for the exploration or production of natural gas.”
The MDE is prohibited from issuing a permit for hydraulic fracturing until October 1, 2017. The MDE is prohibited from issuing a permit for hydraulic fracturing until October 1, 2017.

In the state of Florida, the FDEP has regulatory authority over oil and gas resources. The Division of Water Resource Management (division) within the FDEP oversees the permitting process for drilling production and exploration. The FDEP adopted Rule Chapters 62C-25 through 62C-30 of the Florida Administrative Code to implement and enforce the regulation of oil and gas resources. The division has jurisdiction and authority over all persons and property necessary to administer and enforce all laws relating to the conservation of oil and gas. Drilling and exploration is not authorized or is subject to local governmental approval in tidal waters, near improved beaches, and within municipal boundaries.

When issuing permits for oil and gas exploration or extraction, the division is required to consider the nature, character, and location of the lands involved; the nature, type, and extent of ownership of the applicant; and the proven or indicated likelihood of the presence of oil, gas, or related minerals on a commercially viable basis. The FDEP is required to ensure that all precautions are taken to prevent the spillage of oil or other pollutants in all phases of drilling for and extracting oil, gas, or other petroleum products. Additionally, the FDEP is authorized to issue rules requiring the drilling, casing, and plugging of wells in such a manner as to prevent the escape of oil or other petroleum products from one stratum to another.

Before any person begins work other than environmental assessments or surveying at the site of a proposed drilling operation, a permit to drill is required and a preliminary site inspection must be conducted by the FDEP. An application for a permit to drill must include a proposed casing and cementing program and a location plat survey. Each drilling permit is valid for one year and may be extended for an additional year. Before a permit is granted, the owner or operator is required to post a bond or other form of security for each well. The bond or security amounts vary depending upon well depth. In lieu of posting a bond or security for each well, the owner or operator may file a blanket bond for the coverage of multiple operations, up to ten wells, in the amount of $1 million.

Before a well is used for its intended purpose, a permit to operate the well must be obtained. Operating permits are valid for the life of the well; however, every five years the FDEP is

56 Maryland Code § 14-107.1.
57 Section 377.21(1), F.S.
58 Section 377.24, F.S.
59 Section 377.241, F.S.
60 Section 377.22, F.S.
61 Id.
63 Id.
64 Id.
65 Id.
66 Id.
required to perform a comprehensive field inspection and the permit must be re-certified. Each application and subsequent re-certification must include the appropriate fee; bond or security coverage; a spill prevention and cleanup plan; flowline specifications and an installation plan; containment facility certification; and additional reporting and data submissions, such as driller’s logs and monthly well reports.

A separate permit is not required for the performance of well stimulation techniques. Such techniques are regulated as workovers. Rule 62C-25.002(61) of the Florida Administrative Code defines the term “workover” 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.” An operator is required to notify the FDEP before commencing a workover procedure and must submit a revised Well Record to the FDEP within 30 days after the workover. In December 2013, the FDEP received a workover notice proposing use of an enhanced extraction procedure and requested that the company that submitted the notice not complete the procedure until the FDEP could review the procedure. The company ignored the FDEP’s request and commenced with the procedure. Consequently, the FDEP issued a cease and desist order. The FDEP fined the company $25,000 for violating the cease and desist order. The FDEP conducted water sampling and testing at the well site, in addition to private testing, which indicated that the workover procedure did not impact groundwater.

A person that violates any statute, rule, regulation, order, or permit of the division relating to the regulation of oil or gas resources or who refuses inspection by the division is liable for damages caused to the air, waters, or property of the state; for the reasonable costs of tracing the source of the discharge and for controlling and abating the source and the pollutants; and for the costs of restoring the air, waters, and property. Such persons are also subject to judicial imposition of a civil penalty of up to $10,000 for each offense. Each day during any portion of which a violation occurs constitutes a separate offense.

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70 See, e.g., s. 377.22, F.S., requiring the division to adopt rules to “regulate the shooting, perforating, and chemical treatment of wells” and to “regulate secondary recovery methods, in the introduction of gas, air, water, or other substance in producing formations;” and s. 377.26, F.S., requiring the division to “take into account technological advances in drilling and production technology, including, but not limited to, horizontal well completions in the producing formation using directional drilling methods.”
74 Id.
75 Id.
76 Id.
77 Section 377.37(1)(a), F.S.
78 Id.
79 Id.
Local

As most states with oil and gas resources have extensive regulatory programs governing oil and gas activities, the issue as to what extent the local governments within those states may regulate oil and gas activities within their boundaries has arisen. In some states, local governments have banned or limited the use of certain well stimulation techniques with varying degrees of success. In Colorado, a number of municipalities passed bans on hydraulic fracturing within their city limits, but the Colorado Supreme Court, finding that the cities’ regulations were preempted by state law, overturned the city of Longmont’s ban and the city of Fort Collins’s 5-year moratorium on fracking and the storage and disposal of fracturing wastes within city limits. In Pennsylvania, similar bans were passed, and Pennsylvania state courts held that municipalities retain their authority to limit oil and gas development within their borders, effectively authorizing local governments to regulate the “where, but not the how, of hydrocarbon recovery.”

While cities and counties do not operate oil and gas permitting programs in Florida, some through their land use regulations or zoning ordinances require special exceptions for oil and gas activities or limit oil and gas activities to certain zoning classifications. When authorizing oil and gas activities, local governments consider factors such as consistency with their comprehensive plan, injuries to communities or the public welfare, and compliance with zoning ordinances. Section 377.24(5), F.S., restricts the FDEP from issuing a permit for drilling within the corporate limits of a municipality unless the municipality adopts a resolution approving the permit. Six municipalities, Estero, Bonita Springs, Coconut Creek, Cape Coral, Dade, and Zephyrhills, and eleven counties, Alachua, Bay, Brevard, Broward, Citrus, Martin, Miami-Dade, Pinellas, St. Lucie, Volusia, Wakulla, and Walton, have banned one or more forms of well stimulation techniques by ordinance. Additionally, many other counties and cities have passed

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80 See City of Longmont, et. al v. Colo. Oil and Gas Ass’n, No. 15SC667 (May 2, 2016); see City of Fort Collins v. Colo. Oil and Gas Ass’n, No. 15SC668 (May 2, 1016), available at https://www.courts.state.co.us/Courts/Supreme_Court/Case_Announcements/ (last visited Feb. 23, 2017).
82 See, e.g., Lee County’s Land Development Code §§ 34-1651 and 34-145(c).
83 Id.
84 Ordinance No. 2015-19 bans well stimulation within and below the corporate boundaries of the Village of Estero; Chapter 4, Article VI, Division 15, Section 4-1380 of Bonita Spring’s Land Development Code bans well stimulation; Article IV, Section 13-1000 of Coconut Creek’s Land Development Code bans well stimulation; Ordinance §3.23 prohibits well stimulations within the City of Cape Coral’s corporate limits; Ordinance No. 2016-08 prohibits extreme well stimulation within the City of Dade; Ordinance No. 1310-16 prohibits the use of land for hydraulic fracturing within the City of Zephyrhills; §77.13.5 of Alachua County’s Code of Ordinances prohibits extraction of oil and natural gas; §311 of Bay County’s Land Development Regulation prohibits hydraulic fracturing in all zone districts in unincorporated Bay County; §46-375 of Brevard County’s Code of Ordinances prohibits well stimulations; §66-133 of Citrus County’s Code of Ordinances bans any form of well stimulation; §27-193 of Broward County’s Code of Ordinances prohibits extreme well stimulation; §67.441 of Martin County’s Code of Ordinances prohibits high-pressure well stimulation; §33-437 of Miami-Dade County’s Code of Ordinances prohibits well stimulations; §58-489 of Pinellas County’s Code of Ordinances prohibits well stimulation; Policy 6.1.5.7 of St. Lucie County’s Code of Ordinances prohibits high-intensity petroleum operations; §50-42 of Volusia County’s Code of Ordinances prohibits high-pressure well stimulation; §6-34 of Wakulla County’s Code of Ordinances prohibits high intensity petroleum operations; §9-156 of Walton County’s Code of Ordinances prohibits extreme well stimulation.
resolutions supporting various types of bans and moratoriums relating to well stimulation techniques.\textsuperscript{85}

**Environmental Concerns**

There are a variety of environmental concerns relating to well stimulation techniques. Potential impacts and concerns include: groundwater or surface water contamination; stress on water supplies; inadequate wastewater management and disposal; and air quality degradation.\textsuperscript{86} Because well stimulation techniques are applied to so many types of underground formations using a variety of methods and fluids, environmental impacts vary depending on factors such as the toxicity of the fluid used; the closeness of the fracture zone to underground drinking water; the existence of a barrier between the fracture formation and other formations; and how wastewater is disposed.\textsuperscript{87}

**Water Quality**

The EPA estimated that of the approximately 275,000 wells that have been hydraulically fractured in 25 states between 2000 and 2013, an estimated 21,900 or eight percent were within one mile of at least one public water system groundwater well or surface water intake.\textsuperscript{88} As a result of fracturing, sources of drinking water may be contaminated through the release of gas-phase hydrocarbons, in what is known as stray gas migration, as a result of the movement of liquid or gases out of the well if the well casing or cementing is too weak or if it fails.\textsuperscript{89} The EPA concluded that "the injection of hydraulic fracturing fluids into wells with inadequate mechanical integrity [allowed for] gases or liquids to move to groundwater sources."\textsuperscript{90} While concerns related to inadequate well casing or cementing, are not unique to hydraulic fracturing, horizontally drilled, hydraulically fractured wells pose more production challenges because the well casing is subject to greater pressures.\textsuperscript{91}

Mitigating measures, such as extending the casing farther below groundwater resources and pressure testing the well casing before the injection of fluids, may work to prevent well casing failures. Blowout preventers also help control and prevent pressure build-ups. Furthermore, hydraulically fractured wells in shale formations are usually drilled deeper than vertical wells and, therefore, the vertical separation between the formation and the drinking water resource is usually greater.\textsuperscript{92} Thousands of feet of rock layers typically overlay the produced portion of shale

\textsuperscript{85} See Food & Water Watch, Local Regulations Against Fracking, \url{http://www.foodandwaterwatch.org/insight/local-resolutions-against-fracking#florida}, for a list of local governments that passed resolutions against fracking.

\textsuperscript{86} EPA, Natural Gas Extraction-Hydraulic Fracturing, Providing Regulatory Clarity and Protections Against Known Risks, \url{http://www.epa.gov/hydraulicfracturing} (last visited Feb. 23, 2017).

\textsuperscript{87} Hannah Wiseman, Untested Waters: The Rise of Hydraulic Fracturing in Oil and Gas Production and the Need to Revisit Regulation, 20 FORDHAM ENVTL. L. REV. 115 (2009).

\textsuperscript{88} EPA Study at 2-14.


\textsuperscript{90} EPA Study at 10-3.

\textsuperscript{91} Michael Ratner & Mary Tiemann, Cong. Research Serv., R 43148, An Overview of Unconventional Oil and Natural Gas: Resources and Federal Actions, 8 (Apr. 22, 2015).

\textsuperscript{92} Id. at 7.
and serve as a barrier to contamination.\textsuperscript{93} The vast majority of Florida’s public water supply is obtained from groundwater sources, specifically from the Floridan aquifer system that underlies the state of Florida.\textsuperscript{94} Areas in which oil and gas have been extracted have an upper confining unit that is generally greater than 100 feet, which may serve as a barrier to contamination.\textsuperscript{95} Fractures created during hydraulic fracturing can intersect nearby wells or their fracture networks, resulting in the flow of fluids into those wells and to underground drinking water resources. These “frac-hits” are more likely to occur if wells are close to each other or are on the same well pad.\textsuperscript{96} The likelihood of a frac-hit is less than 10 percent in hydraulically fractured wells more than 4,000 feet apart, while likelihood is nearly 50 percent in wells that are less than 1,000 feet apart.\textsuperscript{97} In Florida, horizontal wells and associated drilling units that are deeper than 7,000 feet have more stringent spacing requirements.\textsuperscript{98} Surface water contamination may occur because of the inadequate storage and disposal of produced water. Produced water is the water that comes to the surface naturally as part of the oil and gas production process. For a hydraulically fractured well the produced water includes the fracturing fluids or flowback. Approximately 10-40 percent of the volume of injected fracturing fluids returns to the surface after hydraulic fracturing.\textsuperscript{99} In most produced waters, the concentrations of toxic elements, such as radioactive radium, are positively correlated with salinity, which suggests that many of the potential water quality issues associated with produced waters may be attributable to the geochemistry of the brines within the shale formations.\textsuperscript{100} As the use of hydraulic fracturing has increased, so has the volume of wastewater generated. Spills of produced water do occur and can result in large volumes or high concentrations of chemicals reaching groundwater sources.\textsuperscript{101} The EPA concluded that spills generally occur at 1 to 10 percent of hydraulically fractured or active wells, with about 7 percent of such spills reaching surface water or groundwater.\textsuperscript{102} In Florida, any spill of waste material must be immediately reported to the division and the appropriate federal agencies, and the owner or operator is responsible for the costs of cleanup or other damage incurred.\textsuperscript{103}

\textbf{Water Supply}

The amount of water used during the performance of a hydraulic fracturing treatment depends on the well depth, formation geology, and the composition of the fluids injected. In some cases, over 90 percent of the fracturing fluid is water and each hydraulically fractured well can require

\textsuperscript{93} \textit{Id.}
\textsuperscript{94} DEP, \textit{Aquifers}, https://fldep.dep.state.fl.us/swapp/Aquifer.asp (last visited Feb. 23, 2017).
\textsuperscript{96} \textit{EPA Study} 6-71.
\textsuperscript{97} \textit{Id.} 10-18.
\textsuperscript{98} Fla. Admin. Code R. 62C-26.004(5).
\textsuperscript{100} \textit{Id.}
\textsuperscript{101} \textit{EPA Study} at 10-3.
\textsuperscript{102} \textit{Id.} at 10-9.
\textsuperscript{103} Section 377.371, F.S.
thousands to millions of gallons of water.\textsuperscript{104} While the total water use for hydraulic fracturing is relatively low compared to other water users,\textsuperscript{105} wells that are good candidates for such techniques are usually located near the same water source and, as a result, the collective impact of water withdrawals may result in increased competition among users.\textsuperscript{106} To decrease the competition among users, some states have implemented pilot projects evaluating the feasibility of reusing produced waters or other brackish or wastewaters.\textsuperscript{107} The reuse of wastewater, however, is often limited by the amount of wastewater that is available.\textsuperscript{108} The volume of produced water from a single well is relatively small compared to the volume of water needed to fracture a well.\textsuperscript{109}

\textbf{Wastewater Management and Disposal}

The vast majority of produced water is disposed of using injection wells. Injection wells are permitted under the Underground Injection Control (UIC) program.\textsuperscript{110} The goal of the UIC program is the effective isolation of injected fluids from underground sources of drinking water.\textsuperscript{111} Class II injection wells are designed to inject fluids associated with the production of oil and natural gas or fluids used to enhance hydrocarbon recovery. While the injection of fracturing fluids, unless the fluid contains diesel, is exempt from the UIC program, the wastewater from oil and gas operations is not exempt.\textsuperscript{112} As unconventional oil and gas wells are being drilled at rapid rates, space for underground injection wells is becoming limited in some areas. In Florida there are 14 active Class II disposal wells, with an average disposal rate per well of 246,000 gallons per day.\textsuperscript{113}

Another issue that is developing with the increase in the number of injection wells is the concern that the deep-well disposal of oil and gas production wastewater is responsible for seismic activity in certain areas.\textsuperscript{114} The Oklahoma Geological Survey determined that the primary suspected source of triggered seismicity is from the injection of produced water associated with oil and gas production in disposal wells.\textsuperscript{115}

\textsuperscript{104} EPA Study at ES-6.
\textsuperscript{107} Id. at 770.
\textsuperscript{108} EPA Study at 10-6.
\textsuperscript{109} Id.
\textsuperscript{111} Id.
\textsuperscript{113} EPA Study at 8-24.
Additionally, in some states the produced water is being sent to treatment facilities that are not equipped to treat wastewater from hydraulically fractured wells. In June of 2016, the EPA, under the authority of the Clean Water Act, published final rules for the oil and gas extraction category. The rules establish pretreatment standards that prevent the discharge of pollutants in wastewater from onshore unconventional oil and gas facilities to publicly owned treatment works. 

**Air Quality**

The key emissions associated with unconventional oil and natural gas production include methane, volatile organic compounds (VOCs), nitrogen oxides, sulfur dioxide, particulate matter, and various hazardous air pollutants. In 2012, the EPA issued the first federal air standards for hydraulically fractured natural gas wells. The New Source Performance Standards required reductions in VOC emissions from hydraulically fractured natural gas wells. In May of 2016, the EPA issued three rules which together seek to curb emissions of methane, VOCs, toxins, and air pollutants, such as benzene, from new, reconstructed, and modified oil and gas sources. The final rule requires compressor stations to monitor leaks, also known as “fugitive emissions,” four times a year and requires owners or operators to find and repair such leaks, which can be a significant source of both methane and VOC pollution. The rule phases in requirements for a process known as “green completion” to capture emissions from hydraulically fractured wells. The EPA expects that implementation of the rule will reduce air pollutants and toxins, as well as, provide health benefits related to reductions in fine particle pollution and ozone toxics, along with improvements in visibility.

### III. Effect of Proposed Changes:

SB 442 bans the performance of advanced well stimulation treatments in the state and clarifies that a permit for drilling or operating a well does not authorize the performance of advanced well stimulation treatments.

The bill defines the term “advanced well stimulation treatment” to include all stages of well intervention performed by injecting fluids into a rock formation:

- At pressure that is at or exceeds the fracture gradient of the rock formation and the purpose or effect is to fracture the formation to increase production or recovery from an oil or gas well, such as hydraulic fracturing or acid fracturing; or

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119 Id.
122 Id.
123 Id.
• At pressure below the fracture gradient of the rock formation and the purpose or effect is to dissolve the formation to increase production or recovery from an oil or gas well, such as matrix acidizing. The definition explicitly excludes techniques used for routine well cleanout work, well maintenance, or the removal of formation damage due to drilling or production, or acidizing techniques used to maintain or restore the natural permeability of the formation near the wellbore.

The bill clarifies that the ban only applies to oil and gas wells.

The bill takes effect upon becoming a law.

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:
   The bill bans certain techniques used to increase production or recovery from an oil or gas well. The fiscal impact of the ban is indeterminate at this time.

C. Government Sector Impact:
   The Department of Environmental Protection (FDEP) may incur additional costs related to amending Rules 62C-25 through 30 of the Florida Administrative Code to implement the ban provided in the bill. Such costs most likely can be absorbed within FDEP’s existing budget.

VI. Technical Deficiencies:

None.
VII. **Related Issues:**
None.

VIII. **Statutes Affected:**
This bill substantially amends section 377.19 of the Florida Statutes.
This bill creates section 377.2405 of the Florida Statutes.

IX. **Additional Information:**

A. **Committee Substitute – Statement of Changes:**
(Summarizing differences between the Committee Substitute and the prior version of the bill.)
None.

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.
By Senator Young

A bill to be entitled
An act relating to advanced well stimulation
treatment; amending s. 377.19, F.S.; defining the term
“advanced well stimulation treatment”; conforming a
cross-reference; creating s. 377.2405, F.S.;
prohibiting the performance of advanced well
stimulation treatments; clarifying that permits for
drilling or operating a well do not authorize the
performance of advanced well stimulation treatments;
providing applicability; providing an effective date.

Be It Enacted by the Legislature of the State of Florida:

Section 1. Present subsections (1) through (32) of section
377.19, Florida Statutes, are redesignated as subsections (2)
through (33), respectively, present subsection (5) of that
section is amended, and a new subsection (1) is added to that
section, to read:

377.19 Definitions.—As used in ss. 377.06, 377.07, and
377.10-377.40, the term:
(1) “Advanced well stimulation treatment” means all stages
of a well intervention performed by injecting fluids into a rock
formation:
(a) At pressure that is at or exceeds the fracture gradient
of the rock formation and the purpose or effect is to fracture
the formation to increase production or recovery from an oil or
gas well, such as hydraulic fracturing or acid fracturing; or
(b) At pressure below the fracture gradient of the rock
formation and the purpose or effect is to dissolve the formation
to increase production or recovery from an oil or gas well, such
as matrix acidizing.
The term does not include techniques used for routine well cleanout work, well maintenance, or removal of formation damage due to drilling or production, or acidizing techniques used to maintain or restore the natural permeability of the formation near the wellbore.

(6) “Gas” means all natural gas, including casinghead gas, and all other hydrocarbons not defined as oil in subsection (16).

Section 2. Section 377.2405, Florida Statutes, is created to read:

377.2405 Advanced well stimulation treatments.—
(1) BAN.—The performance of advanced well stimulation treatments is prohibited in this state. A permit for drilling or operating a well does not authorize the performance of advanced well stimulation treatments.

(2) APPLICABILITY.—This section only applies to wells regulated pursuant to chapter 377.

Section 3. This act shall take effect upon becoming a law.
THE LAST PUBLISHED VERSION OF 
THE DEP 
PUBLIC NOTICE OF POLLUTION RULE 
RULE NO. 62-4.161
DEPARTMENT OF ENVIRONMENTAL PROTECTION
RULE NO.: RULE TITLE:
62-4.161 Public Notice of Pollution

NOTICE OF CHANGE

Notice is hereby given that the following changes have been made to the proposed rule in accordance with subparagraph 120.54(3)(d), F.S., published in Vol. 42 No. 189, September 28, 2016 issue of the Florida Administrative Register.

Substantial rewording of proposed Rule 62-4.161 follows. See the Notice of Proposed Rule for 62-4.161 published on September 28, 2016, in Vol. 42 No. 189, of the Florida Administrative Register for the rule text as originally proposed.

62-4.161 Public Notice of Pollution

(1) Intent. This rule is intended to prevent harm to human health, welfare, or property by assisting the control of pollution. Reportable releases as defined herein are required to be reported to the Department, the general public, local government, and affected property owners. Making these parties aware of the releases in the timeframes provided by this rule, will position them to take action to protect human health, welfare, or property.

(2) Definitions. “Reportable releases” could pose an immediate danger to public health, safety and welfare and, as used in this rule, mean the release of any substance to the outdoor air, land, or waters of the state at an installation within the meaning of section 403.031(4), F.S.) that is not authorized by law and which is discovered by the owner or operator of the installation, or the owner or operator’s employee, agent or contractor, after [effective date of the rule] and:

(a) is reportable to the State Watch Office (also known as the State Warning Point) under Department requirements such as those contained in rules, permits, orders, and variances;

(b) is reportable to the Department or its contracted county under subsections 62-761.450(3) and 62-762.451(3), F.A.C.;

(c) is reportable to the Department under paragraph 62-528.307(1)(x), F.A.C.;

(d) is a hazardous substance (within the meaning of section 376.301(21), F.S.) at or above the quantity established in Table 302.4 of 40 CFR 302.4, July 1, 2016, http://www.frlrules.org/Gateway/reference.asp?No=Ref-07610 and available at www.dep.state.fl.us/pollutionnotice, which is hereby incorporated by reference, for such substance; or

(e) is an extremely hazardous substance (within the meaning of 40 CFR 355.61 http://www.frlrules.org/Gateway/reference.asp?No=Ref-07611) at or above the quantity established in Appendices A and B of 40 CFR 355, July 1, 2016, http://www.frlrules.org/Gateway/reference.asp?No=Ref-07612 and available at www.dep.state.fl.us/pollutionnotice, which are hereby incorporated by reference, for such substance.

(3) Notification. In the event of a reportable release, any persons (within the meaning of section 403.031(5), F.S.) who are owners or operators of the installation at which the reportable release occurred, must:

(a) Within 24 hours of a reportable release or discovery of a reportable release, notify the following persons in accordance with the notice criteria in subparagraph (4)(a)1.:

1. the Department;

2. the general public via notice to at least one broadcast television affiliate that serves the area where the installation is located and a newspaper of general circulation as described in section 50.011, F.S.; and

3. local government as follows:

   a. if the installation is in an incorporated municipality:

      i. the mayor, the chair of the city commission, or the comparable senior elected official representing the municipality in which the installation is located, and

   b. if the installation is not in an incorporated municipality:

      i. the city manager or comparable senior official of the municipality in which the installation is located; or,

      b. if the installation is not in an incorporated municipality:

      i. the chair of the county commission or comparable senior elected official representing the county in which the installation is located, and
ii. the county administrator or comparable senior official of the county in which the installation is located.

(b) Within 48 hours of a reportable release or discovery of a reportable release, notify the persons listed in paragraph (3)(a) in accordance with the notice criteria in subparagraph (4)(a)2.

(c) Within 24 hours of becoming aware that a substance released during a reportable release is present at any level or quantity in the land, outdoor air, or waters of the state located outside of the property boundaries of the installation, notify the owners of the lands at which the substance is present and the Department and local government, as provided in subparagraph (3)(a)3., in accordance with the notice criteria in subsection (4).

(4) Notice Criteria.

(a) Content.

1. The notification required under paragraph (3)(a) must include the following to the extent known at the time of the notice:

   a. name and address of the installation at which the reportable release occurred;
   b. name and title of the reporting person and the nature of their relationship to the installation (e.g., owner or operator);
   c. identification number for any active Department permits, variances, registrations, or orders that are relevant to the reportable release;
   d. name and telephone number of the person to be contacted for further information;
   e. substance released;
   f. estimated quantity of the substance released and quantity that has since been recovered;
   g. cause or source of the release;
   h. location of the release;
   i. date, time, and duration of the release;
   j. medium into which the substance was released; and,
   k. any other persons notified, under this rule, of the reportable release.

2. The notification required under paragraph (3)(b) must include the following to the extent known at the time of the notice:

   a. whether the released substance is migrating or has migrated to land, outdoor air, or waters of the state outside the property boundaries of the installation;
   b. locations where the released substance has migrated to; and
   c. to the extent available, toxicological information and recommended precautions (e.g., evacuation, abstaining from swimming, and abstaining from drinking groundwater) associated with the release as specified on a material safety data sheet or comparable source published by the United States Department of Labor, Occupational Safety and Health Administration or Centers for Disease Control and Prevention.

3. The notification required under paragraph (3)(c) must include the information required under subparagraphs (4)(a)1. and (4)(a)2.

   4. Other information that the reporting party wishes to include to assist in the protection of human health, welfare, or property is permissible and encouraged.

(b) Method.

1. Notices required to be submitted to the Department must be submitted electronically at www.dep.state.fl.us/pollutionnotice.

2. Notices required to be submitted to local governments, broadcast television affiliates, and newspapers of general circulation must be submitted via electronic or hand delivery.

3. Notices required to be submitted to property owners must be submitted via mail, electronic delivery, or hand delivery unless the substance is present in surface waters of the state or in the outdoor air, in which case the notice must be submitted to the general public in accordance with subparagraphs (3)(a)2. and (4)(b)2.

4. Notices submitted to a newspaper of general circulation may be, but are not required to be, published in the notice section of the newspaper.

5. If notices are sent via electronic delivery, a single email to multiple parties is acceptable. Each party is not required to be separately notified.

(5) Failure to provide the notification required by this rule shall be considered a violation of Department rule and subject to the imposition of penalties pursuant to section 403.161, F.S. Where multiple parties are subject to the
notification requirements based on a single reportable release, there need not be multiple notifications. A single notification made by one party in accordance with this rule shall constitute compliance on behalf of all parties that are subject to the requirement. However, where notification is not made in accordance with this rule, the Department may pursue enforcement against all parties subject to the requirement.

Rulemaking Authority 377.22(2), 403.061(7), 403.061(8), 403.061(28), 403.062, 403.855(1), 403.861(9) FS. Law Implemented 377.21, 403.061(16), 403.061(17), 403.061(18), 403.061(28), 403.062, 403.855(3), 403.861(9) FS. History-New XX-XX-XXXX.
Testimony by Timothy Benson, Policy Analyst
Before the Florida Senate Environmental Preservation and Conservation Committee
Tuesday, March 7, 2017

Good afternoon Chairman Book and members of the committee. I thank you for the opportunity to speak today. My name is Timothy Benson, and I am a policy analyst at The Heartland Institute, a nonprofit, nonpartisan, national think tank headquartered in Arlington Heights, Illinois. As someone who grew up in Florida and whose immediate family still calls the Sunshine State home, the protection of the state’s ecosystems is as important to me as it is to any other person in this room.

However, enacting a permanent ban on hydraulic fracturing would be a costly, wholly unnecessary mistake. The existing peer-reviewed evidence shows hydraulic fracturing processes do not pose a systemic impact on groundwater. Since 2010, at least 15 of these studies have been produced, including ones by the Bureau of Economic Geology at the Jackson School of Geosciences at the University of Texas-Austin1, the Department of Geology at the McMicken College of Arts and Sciences at the University of Cincinnati2, the California Council on Science and Technology and the Lawrence Berkeley National Laboratory3, the Department of Energy’s National Energy Technology Laboratory4, and Germany’s Federal Institute for Geosciences and Natural Resources.5

1 J.P. Nicot et al., “Understanding and Managing Environmental Roadblocks to Shale Gas Development: An Analysis of Shallow Gas, NORM, and Trace Metals,” Bureau of Economic Geology, Jackson School of Geosciences, the University of Texas-Austin, September 2015,

2 Elizabeth Claire Botner, “Elevated Methane Levels from Biogenic Coalbed Gas in Ohio Drinking Water Wells near Shale Gas Extraction,” Department of Geology, McMicken College of Arts and Sciences, University of Cincinnati, July 2015,
http://www.artsci.uc.edu/content/dam/artsci/departments/geology/Docs/Generaldocs/Botner%20ETD.pdf

3 Jens T. Birkholzer et al., “An Independent Scientific Assessment of Well Stimulation in California: An Examination of Hydraulic Fracturing and Acid Staminations in the Oil and Gas Industry,” California Council on Science and Technology, Lawrence Berkeley National Laboratory, July 2015,
https://ccest.us/publications/2015/2015SB4-v2ES.pdf

4 Richard W. Hammack et al., “An Evaluation of Fracture Growth and Gas/Fluid Migration as Horizontal Marcellus Shale Gas Wells are Hydraulically Fractured in Greene County, Pennsylvania,” National Energy Technology Laboratory, U.S. Department of Energy, September 2014,

5 Stefan Ladage et al., “Schieferol und Schiefergas in Deutschland: Potenziale und Umweltaspekte,” Bundesanstalt für Geowissenschaften und Rohstoffe, January 2016,
http://www.bgr.bund.de/DE/Themen/Energie/Downloads/Abschlussbericht_13MB_Schieferoelgaspotenzial_Deutsc
This is reinforced by the Environmental Protection Agency’s own $29-million, six-year study of fracking’s impact on groundwater sources, which failed to find any systemic impact caused by the 110,000 oil and natural gas wells that have been in use across the country since 2011. While EPA says leaking well casings and surface spills can impact water sources, the study acknowledges the number of impacted sites are very rare compared to the amount of wells drilled. The rarity of these events proves fracking is generally being conducted safely and can be done so in Florida as well.

While no fracking is currently being conducted in the state, the process has been used in the past, and Florida has a long history of oil and natural gas extraction. The U.S. Energy Information Administration (EIA) reports over 2.2 million barrels of crude oil were extracted from the state in 2015, along with 5.79 billion cubic feet of natural gas.

According to the state Department of Environmental Protection, “Over 1,000 permitted wells have been drilled [in Florida] since 1943. During this timeframe, the petroleum industry has safely produced 611 million barrels of crude oil and 689 billion cubic feet of natural gas. … There have been no major accidents, spills, or blowouts in Florida’s history. Compliance rates with permit provisions and Florida’s rules and statutes for the industry is very high, around 98 percent.”

As well as being environmentally safe, fracking has had a positive economic impact on those areas that have allowed the practice. A study released in December 2016 of communities near shale basins — conducted by researchers at the University of Chicago, Princeton University, and the Massachusetts Institute of Technology (MIT) — determined hydraulic fracturing activity brings $1,300 to $1,900 in annual benefits to local households, including “a 7 percent increase in average income, driven by rises in wages and royalty payments, a 10 percent increase in employment, and a 6 percent increase in housing prices.”

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The fracking process has transformed the energy outlook of the United States over the past decade. According to EIA, fracking now accounts for 51 percent of all U.S. crude oil production.\(^{11}\) The oil and natural gas hydraulic fracturing has enabled us to exploit are cost-effective and abundant, and they can ensure the United States is the world’s largest energy producer well beyond the 21st century.

Drilling is currently being conducted across the country, including in Florida, in a safe and responsible manner. Federal, state, and local governments have tested thousands of sites for hydraulic-fracturing-related pollution of groundwater and drinking-water resources, as well as for air quality. Flatly, there is no scientific justification for banning hydraulic fracturing.

For more information about The Heartland Institute’s work, please visit our websites: www.heartland.org and http://news.heartland.org. You may also call John Nothdurft, Heartland’s director of government relations, at 312/377-4000 or reach him by e-mail at jnothdurft@heartland.org.

The Florida Senate
APPEARANCE RECORD
(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date 3/9/17

Bill Number (if applicable) SB 442

Topic Advanced Well Stimulation

Name Mary-Lynn Culley

Job Title Legislative Liaison

Address 1674 University Pkwy
          Sarasota, FL, 34243

Phone 941-928-0278

Email aichildren@aol.com

Speaking: ☒ For  ☐ Against  ☐ Information

Waive Speaking: ☐ In Support  ☒ Against
(The Chair will read this information into the record.)

Representing Advocacy Institute For Children

Appearing at request of Chair: ☐ Yes  ☒ No

Lobbyist registered with Legislature: ☒ Yes  ☐ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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The Florida Senate
APPEARANCE RECORD

7 March 2017

Meeting Date

SB 442

Bill Number (if applicable)

Topic Environmental impacts

Name Jennifer Rubiello

Job Title State Director, Environment Florida

Address 3110 1st Ave N, Suite 2K

Phone 727 327 3138

Email jennifer@environmentflorida.org

City St. Petersburg

State FL

Zip 33713

Speaking: ☒ For ☐ Against ☐ Information

Waive Speaking: ☐ In Support ☐ Against

(The Chair will read this information into the record.)

Representing Environment Florida

Appearing at request of Chair: ☐ Yes ☐ No

Lobbyist registered with Legislature: ☐ Yes ☐ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)
The Florida Senate

APPEARANCE RECORD

3/7/2017

Meeting Date

SB442

Bill Number (if applicable)

Topic  
Banning Fracking in Florida

Name  
Ken Hays

Job Title  
Retired

Address  
1935 Nanticoke Circle

Street

Tallahassee, FL 32303

City State Zip

Speaking:  ✓ For □ Against □ Information

Waive Speaking: □ In Support □ Against

(Resident will read this information into the record.)

Representing  
Florida citizens in favor of clean water

Appearing at request of Chair:  □ Yes ✓ No

Lobbyist registered with Legislature:  □ Yes ✓ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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The Florida Senate
APPEARANCE RECORD

Meeting Date 7 March 17

Topic Tourism / economic impact

Name Michelle Allen

Job Title Florida Organizer - Food & Water Watch

Address 233 3rd St. N.

Phone 954.687.9224

Email mallen@fwwatch.org

City St. Petersburg State FL Zip 33701

Speaking: ☑ For ☐ Against ☐ Information

Waive Speaking: ☐ In Support ☑ Against

(The Chair will read this information into the record.)

Representing Food and Water Watch

Appearing at request of Chair: ☐ Yes ☐ No

Lobbyist registered with Legislature: ☐ Yes ☐ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.
3/7/2017
Meeting Date

Topic
Advanced Well Stimulation Treatment

Name
Susan Glickman

Job Title
Florida Director

Address
PO Box 310
Indian Rocks Beach FL 33785

Phone
727.742.9003

Email
susan@cleanenergy.org

Speaking:  □ For  □ Against  □ Information

Representing
Southern Alliance for Clean Energy

Appearing at request of Chair:  □ Yes  □ No

Waive Speaking:  □ In Support  □ Against
(The Chair will read this information into the record.)

Lobbyist registered with Legislature:  □ Yes  □ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.
The Florida Senate
APPEARANCE RECORD

Meeting Date 3/7/17

Bill Number (if applicable) 442

Topic FRACKING

Name DAVID CULLEN

Job Title

Address 1674 University Pkwy #295

Phone 941-323-2409

Email culenasea@bellsouth.net

State Zip SARASOTA FL 34234-3423

Speaking: ☑ For ☐ Against ☐ Information

Waive Speaking: ☐ In Support ☐ Against

(The Chair will read this information into the record.)

Representing SIERA CLUB FLORIDA

Appearing at request of Chair: ☐ Yes ☑ No

Lobbyist registered with Legislature: ☑ Yes ☐ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)
Meetina L
The Florida Senate
APPEARANCE RECORD

Meeting Date: 3/7/17

Bill Number (if applicable): SB 442

Topic: HB 442 FRACKING

Name: Patricia T. Thomas

Job Title: Retired - Volunteer

Address: 2985 Teton Trail

Phone

Email

Street

City

State

Zip

Speaking: ☑ For □ Against □ Information

Waive Speaking: □ In Support □ Against

(The Chair will read this information into the record.)

Representing: Environmental Caucus, Democratic Club of N. Fla.

Appearing at request of Chair: ☑ Yes □ No

Lobbyist registered with Legislature: □ Yes ☑ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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The Florida Senate

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date

Bill Number (if applicable)

Topic

SB 442

Name

Kim Ross

Job Title

President, ReThink Energy Florida

Address

1203 Buckingham Dr

Street

Tallahassee, FL 32308

City

FL

State

Zip

Phone

850-886-2565

Email

kim@rethinkenergyflorida.org

Speaking: □ For □ Against □ Information

Waive Speaking: □ In Support □ Against

(The Chair will read this information into the record.)

Representing

ReThink Energy Florida

Appearing at request of Chair: □ Yes □ No

Lobbyist registered with Legislature: □ Yes □ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

S-001 (10/14/14)
Meeting Date

Topic  FRACKING BAN

Name  STEVE LOWI

Job Title

Address  8140 CN 304
          BUNNELL  FL  32110

Phone  386 597 9335

Email  EQWUSMUSIC@AOL.COM

Speaking:  ☑ For  ☐ Against  ☐ Information
Waive Speaking:  ☐ In Support  ☑ Against
(The Chair will read this information into the record.)

Representing

Appearing at request of Chair:  ☐ Yes  ☑ No
Lobbyist registered with Legislature:  ☐ Yes  ☑ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.
THE FLORIDA SENATE

APPEARANCE RECORD

( Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting )

Meeting Date

3/7/17

Bill Number ( if applicable )

SB 442

Amendment Barcode ( if applicable )

Topic

SB 442

Name

Edward Mahoney

Job Title

Address

964 Aragon Ave

Street

St Augustine

City

State

FL

Zip

32086

Phone

304 559 4264

Email

ve40holee@90i.com

Speaking:

For

Against

Information

Waive Speaking:

In Support

Against

(The Chair will read this information into the record.)

Representing

Self

Appearing at request of Chair:

Yes

No

Lobbyist registered with Legislature:

Yes

No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.
3/7/2017

Meeting Date

The Florida Senate

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Topic: SB 442 Fracking Ban

Name: Robin Mahonen

Job Title:

Address: 964 Aragon Ave
St. Augustine, FL 32086

Phone: (304) 639-5538
Email: Rrafael2@aol.com

Speaking: ☑ For □ Against □ Information

Waive Speaking: □ In Support ☑ Against
(The Chair will read this information into the record.)

Representing: Self

Appearing at request of Chair: □ Yes ☑ No

Lobbyist registered with Legislature: □ Yes ☑ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)
The Florida Senate

APPEARANCE RECORD

(Meeting Date: 3/17/17)

Bill Number (if applicable): 442

Topic: 

Name: GAIL MARIE PERRY

Job Title: CHAIR, COUNCIL OF FLORIDA

Address: PO BOX 1766

Phone: 954.850.4055

Email: workingfols@hotmail.com

Speaking: For [X] Against [ ] Information

Waive Speaking: [ ] In Support [ ] Against

Representing: COMMUNICATIONS WORKERS OF AMERICA

Appearing at request of Chair: [X] Yes [ ] No

Lobbyist registered with Legislature: [ ] Yes [X] No

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S-001 (10/14/14)
The Florida Senate

APPEARANCE RECORD

Meeting Date: 3/7/17

Bill Number: 442

Topic: SB 442

Name: Aliki Moncrief

Job Title: Exec. Director, Florida Conservation Voters

Address: 1700 N. Monroe St. #11-286

Phone: 850-629-4656

Email: contact@fcv.org

Speaking: X For, [ ] Against, [ ] Information

Representing: Florida Conservation Voters

Waive Speaking: [ ] In Support, [ ] Against

Appearing at request of Chair: [ ] Yes, [x] No

Lobbyist registered with Legislature: [ ] Yes, [ ] No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.
3/7/17
Meeting Date

SB 442
Bill Number (if applicable)

SB 442
Amendment Barcode (if applicable)

Topic

Name
Daniel Bertree

Job Title
FSU Student

Address
1600 W Call St,
Tallahassee, FL 32304

Phone

Email
dtp14c@my.fsu.edu

Speaking: ☒ For ☐ Against ☐ Information

Waive Speaking: ☐ In Support ☒ Against
(The Chair will read this information into the record.)

Representing
The Office of Student Sustainability FSU

Appearing at request of Chair: ☐ Yes ☐ No

Lobbyist registered with Legislature: ☐ Yes ☐ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.
THE FLORIDA SENATE
APPEARANCE RECORD

Meeting Date: 3-7-17

Bill Number: 442

Topic

Name: JESS MCCARTY

Job Title: ASSISTANT COUNTY ATTORNEY

Address:

Street: 111 NW 15th St
City: MIAMI
State: FL
Zip: 33128

Phone: 305-979-7110
Email: JMMZEMIAM1DADEFL

Speaking: √ For  ☐ Against  ☐ Information
Waive Speaking: √ In Support  ☐ Against
(The Chair will read this information into the record.)

Representing: MIAMI-DADE COUNTY

Appearing at request of Chair: ☐ Yes  √ No
Lobbyist registered with Legislature: ☐ Yes  ☐ No

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S-001 (10/14/14)
THE FLORIDA SENATE
APPEARANCE RECORD
(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date 3/7/17

Bill Number (if applicable) 442

Topic Hydraulic Fracturing

Name Rebecca O'Hara

Job Title Sr. Legislative Advocate

Address P.O. Box 1757

Phone 202-968-4

Email rohara@flcities.org

Street Tallahassee FL 32302-1757

City State Zip

Speaking: [ ] For [ ] Against [ ] Information

Representing Fla League of Cities

Waive Speaking: [X] In Support [ ] Against

Appearing at request of Chair: [ ] Yes [ ] No

Lobbyist registered with Legislature: [ ] Yes [ ] No

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S-001 (10/14/14)
The Florida Senate

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date 3/1/17

Bill Number (if applicable) SB 442

Amendment Barcode (if applicable)

Topic Fracking Prohibition

Name Linda Miklaucitz

Job Title

Address 2542 Arthur's Court

Street Tallahassee FL FL

City State Zip

Phone 850-873-4370

Email LMiklaucitz@cop.com

Speaking: [ ] For [ ] Against [ ] Information

Waive Speaking: [ ] In Support [ ] Against

(The Chair will read this information into the record.)

Representing

Appearing at request of Chair: [ ] Yes [ ] No

Lobbyist registered with Legislature: [ ] Yes [ ] No

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S-001 (10/14/14)
**The Florida Senate**

**Appearance Record**

**Meeting Date:** 3/7/2017

**Topic:** Fracking - Induced Disease

**Name:** Dr. Marc Freeman

**Job Title:** Professor

**Address:** 543 McClie Hill

**Phone:** 250-562-1335

**Email:** proactive@concast.com

**City:** 32303

**State:** Zip

**Speaking:** [ ] For  [ ] Against  [ ] Information

**Representing:** [ ] Self

**Appearing at request of Chair:** [ ] Yes  [ ] No

**Lobbyist registered with Legislature:** [ ] Yes  [ ] No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

*This form is part of the public record for this meeting.*
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Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting.

| Lobbyist registered with Legislature: | Yes [x] | No  
|-------------------------------------|---------|------

Appearing at request of Chair: | Yes [x] | No  

Representing:  
Concerned Citizen  

The Chair will read this information into the record.  
Waive Speaking:  
In Support  
Against  

Speaking:
City Tallahassee  
State Florida  
Address  

Job Title  

Name  
DAVID BANKS  

Sharing Bank Name  
3 q42 Bank Guarantee  

Topic  

Meeting Date  

This form is part of the public record for this meeting.

APPENDIX RECORD

THE FLORIDA SENATE
This form is part of the public record for this meeting.

Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak at this meeting.

Appearing at request of Chair: [ ] Yes [ ] No

Representing
Martin County Board of County Commissioners

The Chair will read this information into the record.

( ) in Support ( ) Against

Waive Speaking:

Email: West Martin. Fl.
Phone: 321-243-2276

Amendment barcode (if applicable)

Bill Number (if applicable)
412

Meeting Date
3/17/11

Appearence Record
The Florida Senate
The Florida Senate
APPEARANCE RECORD
(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date: 3/7/17
Bill Number: SB 412

Topic: Advanced Well Stimulation

Name: Brenda Waeger
Job Title: Executive Assistant, Sustainable Tallahassee
Address: 630 E. College Ave
          Tallahassee, FL 32301
Phone: 305-328-3345
Email: brendawaeger@gmail.com

Speaking: □ For □ Against □ Information
Waive Speaking: □ In Support □ Against
(The Chair will read this information into the record.)

Representing: Floridians Against Fracking

Appearing at request of Chair: □ Yes □ No
Lobbyist registered with Legislature: □ Yes □ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)
The Florida Senate

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date: 3/7/17

Topic: Advance well stimulation

Name: Hunter Becker

Job Title: Student

Address: 603 Dixie Dr. Apt 2-14

Phone: 954-802-8899

Email: hab14@my.fsu.edu

City: Tallahassee

State: FL

Zip: 32304

Speaking: [ ] For [ ] Against [ ] Information

Waive Speaking: [ ] In Support [ ] Against

(The Chair will read this information into the record.)

Representing: Floridians Against Fracking

Appearing at request of Chair: [ ] Yes [ ] No

Lobbyist registered with Legislature: [ ] Yes [ ] No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)
THE FLORIDA SENATE

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date 3-7-17

Bill Number (if applicable) 442

Topic Advanced Well Stimulation

Name Ryan Smart

Job Title President

Address 308 N. Monroe St

Street Tallahassee

City State Zip 22301

Phone 850-222-6277

Email rsmart@1000friends.org

Speaking: □ For □ Against □ Information

Waive Speaking: □ Yes □ No

Representing 1000 Friends of Florida

Appearing at request of Chair: □ Yes □ No

Lobbyist registered with Legislature: □ Yes □ No

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This form is part of the public record for this meeting.

S-001 (10/14/14)
3/8/17
Meeting Date

Topic	FRACKING

Name	Nana Royer

Job Title	Rep (former Reg. Nurse)

Address	6 Willows Dr
Street
St. Augustine, FL 32080
City State Zip

Phone	904 377 1602
Email	Nana@nrdf.net

Speaking: 

☐ For ☐ Against ☐ Information

Waive Speaking:

☐ In Support ☐ Against
(The Chair will read this information into the record.)

Representing

INDIVISIBLE ST JOHNS UC Fellowship of St. Ang

Appearing at request of Chair: ☐ Yes ☐ No

Lobbyist registered with Legislature: ☐ Yes ☐ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.
The Florida Senate

APPEARANCE RECORD

3/7/17

Meeting Date

SB 442

Bill Number (if applicable)

Topic Advance Well Stimulation Treatment

Name Jacob Sanchez

Job Title Engineering Student

Address 5581 Eagle Lake Dr

Phone __________________________

Email __________________________

City Palm Beach Gardens

State FL

Zip 33418

Speaking: ☐ For ☐ Against ☐ Information

Waive Speaking: ☑ In Support ☐ Against
(The Chair will read this information into the record.)

Representing __________________________

Appearing at request of Chair: ☐ Yes ☐ No

Lobbyist registered with Legislature: ☐ Yes ☐ No

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This form is part of the public record for this meeting.
3/7/17
Meeting Date

442
Bill Number (if applicable)

Advanced Well Stimulation
Topic

Gerrit Van Lent
Name

Legislative Policy Coordinator
Job Title

994 Old Bainbridge Road
Address

Tallahassee, FL 32301
Street

Phone 305-393-3465

Email givanelut93@gmail.com

Speaking: Box for □ Against □ Information

Representing ReThink Energy Action Fund

Appearing at request of Chair: □ Yes □ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.
The Florida Senate
APPEARANCE RECORD

Meeting Date 3-7-17

Topic Advanced well stimulation

Name Marty Cassini

Job Title Legislative Counsel

Address 115 s. Andrews Ave

Phone 954-357-7575

Email mcassini@broward.org

Speaking: □ For □ Against □ Information

Waive Speaking: □ In Support □ Against
(The Chair will read this information into the record.)

Representing Broward County

Appearing at request of Chair: □ Yes □ No

Lobbyist registered with Legislature: □ Yes □ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.
3/7/2017

Meeting Date

Topic Fracking

Name Karen Pelham

Job Title

Address 3433 Welwyn Way

Tallahassee, FL 32309

Phone 850-668-5930

Email kbpelham@gmail.com

Speaking: ☑ For ☐ Against ☐ Information

Waive Speaking: ☑ In Support ☐ Against

(The Chair will read this information into the record.)

Representing Women's March Florida Environmental group

Appearing at request of Chair: ☐ Yes ☐ No

Lobbyist registered with Legislature: ☐ Yes ☑ No

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This form is part of the public record for this meeting.
3 7 17
Meeting Date

Bill Number (if applicable)

Topic Fracking

Name Brian Lee

Job Title Legislative Director

Address 1203 Buckingham Dr.
Street Tallahassee
City FL State 32308
Zip

Phone 850-766-7309
Email brian@rethinkenergyflorida.org

Speaking: □ For □ Against □ Information
Waive Speaking: □ In Support □ Against
(The Chair will read this information into the record.)

Representing Floridians Against Fracking/Florida Food and Water Watch

Appearing at request of Chair: □ Yes □ No
Lobbyist registered with Legislature: □ Yes □ No

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The Florida Senate

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date 3/2/17

Bill Number (if applicable) 442

Topic Advanced Well Stimulation Treatment

Name Jennifer Wilson

Job Title Lobbyist

Address 101 E. Kennedy Blvd., Suite 4000

Phone 813-407-0703

Email Jennifer.wilson@arlaw.com

Speaking: [ ] For [ ] Against [ ] Information

Waive Speaking: [ ] In Support [ ] Against

(The Chair will read this information into the record.)

Representing

Appearing at request of Chair: [ ] Yes [ ] No

Lobbyist registered with Legislature: [ ] Yes [ ] No

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This form is part of the public record for this meeting.
Meeting Date: 3/7/17

Bill Number (if applicable): 442

Topic: Ban oil fracking

Name: Zephyr Teachout

Job Title: Transit

Address: 3827 NE 14th Street

Phone: 352-266-3524

Email: zephyr teachout @ gnyah.com

Speaking: [ ] For  [ ] Against  [ ] Information

Waive Speaking: [ ] In Support  [ ] Against

(The Chair will read this information into the record.)

Representing: Zephyr Teachout

Appearing at request of Chair: [ ] Yes  [ ] No

Lobbyist registered with Legislature: [ ] Yes  [ ] No

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This form is part of the public record for this meeting.
3/7/17

Meeting Date

Topic Well Stimulation

Name Brewster Bevis

Job Title Senior Vice President

Address 516 N. Adams St

Phone 224-7173

Email bbevis@aif.com

Speaking: ☑ For ☐ Against ☐ Information

Waive Speaking: ☐ In Support ☑ Against

(The Chair will read this information into the record.)

Representing Associated Industries of Florida

Appearing at request of Chair: ☑ Yes ☐ No

Lobbyist registered with Legislature: ☑ Yes ☐ No

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The Florida Senate
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date: 3-7-2017

Topic: FREEKINGGO! ENVIRONMENTAL CONSERVATION

Name: Frank Angel

Job Title: RETIREE UAW CHAIRMAN

Address: 21180 Virginia

Street: Boco Raton

City: FL

State: 33433

Phone: 708-955-6254

Email: man28474@email.com

Speaking: [X] For [ ] Against [ ] Information

Waive Speaking: [X] In Support [ ] Against

(The Chair will read this information into the record.)

Representing: SELF

Appearing at request of Chair: [X] Yes [ ] No

Lobbyist registered with Legislature: [ ] Yes [X] No

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<table>
<thead>
<tr>
<th>Meeting Date</th>
<th>3-7-2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB-442</td>
<td>Bill Number (if applicable)</td>
</tr>
<tr>
<td>Topic</td>
<td>Ban on Fracking SB-442</td>
</tr>
<tr>
<td>Name</td>
<td>Jimmy Filiponi</td>
</tr>
<tr>
<td>Job Title</td>
<td>T.J.O. Houghmon</td>
</tr>
<tr>
<td>Address</td>
<td>1780 Davidson Road</td>
</tr>
<tr>
<td>Street</td>
<td>Clewiston</td>
</tr>
<tr>
<td>City</td>
<td>FL</td>
</tr>
<tr>
<td>State</td>
<td>33440</td>
</tr>
<tr>
<td>Zip</td>
<td>Phone</td>
</tr>
<tr>
<td>Email</td>
<td>Speaking:</td>
</tr>
<tr>
<td>Representing</td>
<td>I.A.M. L.L. 215</td>
</tr>
<tr>
<td>Appearing at request of Chair:</td>
<td>Yes</td>
</tr>
<tr>
<td>Lobbyist registered with Legislature:</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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The Florida Senate
APPEARANCE RECORD

3-7-17
Meeting Date

Topic Fracking Ban

Name Cornelius Fowler

Job Title

Address 2611 Le Jeune Rd
Cairnston, FL 33440

Phone 561-248-0945
Email Fowler6579@gmail.com

Speaking: [ ] For [ ] Against [ ] Information

Representing [ ] IAM Local Z152

Appearing at request of Chair: [ ] Yes [ ] No
Lobbyist registered with Legislature: [ ] Yes [ ] No

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S-001 (10/14/14)
The Florida Senate

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date

SB 442

Bill Number (if applicable)

Topic  Bar on Fracking / SB 442

Name  Edward Garcia

Job Title  Florida Citizen

Address  301 NW Ave D

Street

Belle Glade

City

FL

State

33430

Zip

Phone  561-261-0316

Email

Speaking:  [ ] For  [ ] Against  [ ] Information

Waive Speaking:  [ ] In Support  [ ] Against

(The Chair will read this information into the record.)

Representing  FAM LI 2152

Appearing at request of Chair:  [ ] Yes  [X] No

Lobbyist registered with Legislature:  [ ] Yes  [ ] No

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THE FLORIDA SENATE

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date: 3-7-17

Topic: BAN FRACKING

Name: Herb Shelton

Job Title: 

Address: 2115 Longview Dr.

Street: Tallahassee

City: Tallahassee, FL

State: 32303

Zip: 

Phone: 

Email: herbie323@yahoo.com

Speaking: [ ] For [ ] Against [ ] Information

Waive Speaking: [ ] In Support [ ] Against

Representing: ENVIRONMENTAL CAUCUS OF FLORIDA

Appearing at request of Chair: [ ] Yes [ ] No

Lobbyist registered with Legislature: [ ] Yes [ ] No

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S-001 (10/14/14)
The Florida Senate

APPEARANCE RECORD

3-7-2017

Meeting Date

SB-442

Bill Number (if applicable)

Topic: Ban on Fracking / SB-442

Joaquin Almazan

Name

Florida Citizen

Job Title

PO Box 755

Address

South Bay, FL 33493

City State Zip

Phone 561-516-4650

Email

Speaking: ☐ For ☐ Against ☐ Information

Representing

Appearing at request of Chair: ☐ Yes ☐ No

Lobbyist registered with Legislature: ☐ Yes ☐ No

Waive Speaking: ☑ In Support ☐ Against

(The Chair will read this information into the record.)

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<table>
<thead>
<tr>
<th>Topic</th>
<th>Fracking Ban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Adam Morley</td>
</tr>
<tr>
<td>Job Title</td>
<td>Captain</td>
</tr>
<tr>
<td>Address</td>
<td>1205 SR 206 F</td>
</tr>
<tr>
<td></td>
<td>St. Augustine, FL 32086</td>
</tr>
<tr>
<td>Phone</td>
<td>904-540-7245</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:captmorley@yahoo.com">captmorley@yahoo.com</a></td>
</tr>
<tr>
<td>Speaking</td>
<td>□ For □ Against □ Information</td>
</tr>
<tr>
<td>Waive Speaking</td>
<td>☒ In Support □ Against</td>
</tr>
</tbody>
</table>

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Meeting Date: 3/7/17

The Florida Senate

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Bill Number (if applicable): SB 492

Amendment Barcode (if applicable)

Topic

Name: Doug Miller

Job Title: Statewide Coordinator - Floridians Against Fracking

Address: 3034 O'Brien Dr.

City: Tallahassee

State: FL

Zip: 32309

Phone: 850-766-6867

Email: doug@anti-fracking.org

Speaking: [ ] For [ ] Against [ ] Information

Waive Speaking: [ ] In Support [ ] Against

Representing: Floridians Against Fracking

Appearing at request of Chair: [ ] Yes [ ] No

Lobbyist registered with Legislature: [ ] Yes [ ] No

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The Florida Senate

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date: 3/17/2007

Topic: FRACKING BAN

Name: JO McINTYRE

Job Title: 

Address: 

City, State, Zip: ST AUGUSTINE, FL, 32080

Phone: 904 481 3175

Email: jo mcintyre @ bellkraft.net

Speaking: [ ] For [ ] Against [ ] Information

Waive Speaking: [x] In Support [ ] Against

(The Chair will read this information into the record.)

Representing: 

Appearing at request of Chair: [ ] Yes [ ] No

Lobbyist registered with Legislature: [ ] Yes [ ] No

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S-001 (10/14/14)
# APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

**Meeting Date**: 03/07/17

**Topic**: Ban Fracking in FL

**Name**: Ashley French

**Job Title**: Store Manager

**Address**: 222 W King Street, St Augustine, FL 32084

**Phone**: 904-371-5180

**Email**: ashley.french65@gmail.com

**Speaking**: □ For □ Against □ Information

**Waive Speaking**: [ ] In Support [ ] Against

_(The Chair will read this information into the record.)_

**Representing**

**Appearing at request of Chair**: [ ] Yes [ ] No

**Lobbyist registered with Legislature**: [ ] Yes [ ] No

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The Florida Senate

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date 3/7/2017

Bill Number (if applicable) SB 442

Topic In support of SB 442

Name Daniel Pertwee

Job Title FSU Student

Address 1600 W Call St

Phone

City Tallahassee

State FL

Zip 32304

Speaking: ☐ For ☐ Against ☐ Information

Waive Speaking: ☑ In Support ☐ Against

(The Chair will read this information into the record.)

Representing Office of Student Sustainability

 Appearing at request of Chair: ☐ Yes ☐ No

Lobbyist registered with Legislature: ☐ Yes ☐ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

S-001 (10/14/14)
3/17/2017

Meeting Date

Topic: In Support of SB 442

Name: Megan Nichols

Job Title: FSU student

Address: 1667 Sharkey Street
Tallahassee, FL 32304

Phone: 321-266-5081

Email: seanemone@gmail.com

Speaking: [ ] For [ ] Against [ ] Information

Waive Speaking: [ ] In Support [ ] Against
(The Chair will read this information into the record.)

Representing: Environmental Service Program

Appearing at request of Chair: [ ] Yes [ ] No

Lobbyist registered with Legislature: [ ] Yes [ ] No

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The Florida Senate
APPEARANCE RECORD
(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date: 3/17/17

Bill Number (if applicable)

Amendment Barcode (if applicable)

Topic: SB 447

Name: Cynthia Schwartz Esch

Job Title: Retired PB
dott

Address: 3980 Bobbi, Birk Cir
Tallahassee 32312

Phone: 850-509-0735
Email: mmpinod@comcast.com

Speaking: [ ] For [ ] Against [ ] Information

Representing Democratic Women's Club of Florida

Appearing at request of Chair: [ ] Yes [ ] No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.
**Meeting Date**: 3/7/16

**Bill Number (if applicable)**: SB 442

**Topic**

**Name**: GLENA ABDULLAH

**Job Title**: SERVICES TECHNICIAN

**Address**: 4305 SW 98 AV

**Phone**: 786-376-1181

**Email**

**Speaking**: [ ] For [ ] Against [ ] Information

**Waive Speaking**: [X] In Support [ ] Against

(The Chair will read this information into the record.)

**Representing**: SELF

**Appearing at request of Chair**: [ ] Yes [X] No

**Lobbyist registered with Legislature**: [ ] Yes [X] No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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The Florida Senate
APPEARANCE RECORD
(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date 3/7/17

Bill Number (if applicable) SB 442

Topic

Name Gary Hunter

Job Title Attorney

Address 119 S. Monroe St., Suite 300
Street Tallahassee
City FL
State 32301
Zip

Phone 850-222-7500

Email garyh@hgslaw.com

Speaking: □ For □ Against □ Information

Waive Speaking: □ In Support □ Against
(The Chair will read this information into the record.)

Representing Exxon Mobil, Florida Chamber of Commerce, SKlar Petroleum

Appearing at request of Chair: □ Yes □ No

Lobbyist registered with Legislature: □ Yes □ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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The Florida Senate

APPEARANCE RECORD

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<table>
<thead>
<tr>
<th>Meeting Date</th>
<th>Topic</th>
<th>Name</th>
<th>Job Title</th>
<th>Address</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 7, 2017</td>
<td>SB 442 - HYDRAULIC FRACTURING WELLS</td>
<td>STEPHANIE MEADOWS</td>
<td>MANAGER, UPSTREAM ARC</td>
<td>1220 L STREET NW</td>
<td>202/687-8578</td>
<td><a href="mailto:MEADOWS@API.ORG">MEADOWS@API.ORG</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Speaking:</th>
<th>For</th>
<th>Against</th>
<th>Information</th>
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<tbody>
<tr>
<td>Waive Speaking:</td>
<td>In Support</td>
<td>Against</td>
<td></td>
</tr>
</tbody>
</table>

(The Chair will read this information into the record.)

Representing: AMERICAN PETROLEUM INSTITUTE

Appearing at request of Chair: Yes No

Lobbyist registered with Legislature: Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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THE FLORIDA SENATE

APPEARANCE RECORD
(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date 3/7/17

Topic Oil and gas development

Name Ben Norris

Job Title Senior Counsel

Address 222 17 1220 L St., NW

Phone 202-682-8251

Email norrisB@apip.org

Address 222 17 1220 L St., NW

City Washington

State DC

Zip 20005

Speaking: ☒ For ☐ Against ☐ Information

Waive Speaking: ☐ In Support ☐ Against
(The Chair will read this information into the record.)

Representing American Petroleum Institute

Appearing at request of Chair: ☐ Yes ☒ No

Lobbyist registered with Legislature: ☐ Yes ☒ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.
March 7, 2017

Meeting Date

SB 442 - Oil and Gas Development

Topic

Uni Blake

Name

Scientific Advisor

Job Title

1220 L Street, NW

Address

Washington, DC 20005

City State Zip

202-682-8480

Phone

Blakell@apo.org

Email

Representing American Petroleum Institute

Appearing at request of Chair: No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

S-001 (10/14/14)
Meeting Date: 3/7/17

Topic: 

Name: Logan Pike

Job Title: Director of Public Affairs

Address: 100 N Duval St.

Phone: 850-386-3131

Email: lpike@jamesmadison.org

Speaking: X Against

Representing: The James Madison Institute

Appearing at request of Chair: X No

Lobbyist registered with Legislature: X No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.
### The Florida Senate

**APPEARANCE RECORD**

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

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<tr>
<th>Meeting Date</th>
<th>3/7/17</th>
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<table>
<thead>
<tr>
<th>Topic</th>
<th>Well Stimulation</th>
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<table>
<thead>
<tr>
<th>Name</th>
<th>Philip K. McMillon</th>
</tr>
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<table>
<thead>
<tr>
<th>Job Title</th>
<th>Vice President Neal Land &amp; Timber</th>
</tr>
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<table>
<thead>
<tr>
<th>Address</th>
<th>P.O. Box 548</th>
</tr>
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<table>
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<tr>
<th>Street</th>
<th>Blountstown</th>
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<table>
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<tr>
<th>State</th>
<th>32123</th>
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<table>
<thead>
<tr>
<th>Phone</th>
<th>850-643-7082</th>
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<table>
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<tr>
<th>Email</th>
<th><a href="mailto:pkmc@fairpoint.net">pkmc@fairpoint.net</a></th>
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<tr>
<th>Speaking</th>
<th>For [ ] Against [X] Information</th>
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<table>
<thead>
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<th>Waive Speaking</th>
<th>In Support [ ] Against [X]</th>
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(The Chair will read this information into the record.)

<table>
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<tr>
<th>Representing</th>
<th>Neal Land &amp; Timber</th>
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</thead>
</table>

Appearing at request of Chair: [ ] Yes  [X] No

Lobbyist registered with Legislature: [ ] Yes  [X] No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)
March 7
Meeting Date

SB 244
Bill Number (if applicable)

Topic  SB 244

Name  Julia Fuentes

Job Title  President, FL State Hispanic Chamber of Commerce

Address

Phone

Email

Speaking:  ☐ For  ☑ Against  ☐ Information
Waive Speaking: ☐ In Support  ☐ Against
(The Chair will read this information into the record.)

Representing  Florida State Hispanic Chamber of Commerce

Appearing at request of Chair:  ☐ Yes  ☑ No
Lobbyist registered with Legislature:  ☐ Yes  ☑ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.
The Florida Senate

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date 7 MAR 2017

Topic

Name DENNIS O. FREYTES

Job Title US VETERAN - FL HALL OF FAME

Address 9453 WESTOVER CIRCLE

Street

WINDERMER, FL 34788

City State Zip

Phone 407-298-1151

Email

Speaking: [ ] For [x] Against [ ] Information

Representing [ ] Vets for Energy

Appearing at request of Chair: [ ] Yes [x] No

Waive Speaking: [ ] In Support [ ] Against

(The Chair will read this information into the record.)

Lobbyist registered with Legislature: [ ] Yes [x] No

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S-001 (10/14/14)
The Florida Senate
APPEARANCE RECORD
(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date 3/7/17

Bill Number (if applicable) SB 442

Amendment Barcode (if applicable)

Topic

Name Timothy Benson

Job Title Policy Analyst - The Heartland Institute

Address 3939 N Wilke Rd, Arlington Heights IL 60004

Phone (312) 377-4000

Email thenson@heartland.org

Speaking: ☒ Against ☐ Information

Representing The Heartland Institute

Appearing at request of Chair: ☒ Yes ☐ No Lobbyist registered with Legislature: ☐ Yes ☒ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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The Florida Senate

APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

Meeting Date

3/7/17

Bill Number (if applicable)

SB 442

Topic

Advanced Well Stimulation Treatment

Name

Alison B. Dudley

Job Title

President, AB Dudley & Associates

Address

P.O. Box 428

City

Tallahassee

State

Fl

Zip

32302

Phone

850/559-1139

Email

alison@ Dudley & Dudley and Associates.com

Speaking: □ For □ Against □ Information

Waive Speaking: □ In Support □ Against

(The Chair will read this information into the record.)

Representing

Chevron USA

Appearing at request of Chair: □ Yes □ No

Lobbyist registered with Legislature: □ Yes □ No

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S-001 (10/14/14)
### The Florida Senate

**Appearance Record**

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<thead>
<tr>
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<tbody>
<tr>
<td>Topic</td>
<td>SB 442</td>
</tr>
<tr>
<td>Name</td>
<td>Jake Cremer</td>
</tr>
<tr>
<td>Job Title</td>
<td>Attorney</td>
</tr>
<tr>
<td>Address</td>
<td>401 East Jackson St, Suite 2200</td>
</tr>
<tr>
<td></td>
<td>Tampa, FL 33602</td>
</tr>
<tr>
<td>Phone</td>
<td>813-419-3914</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:jtcremer@gmail.com">jtcremer@gmail.com</a></td>
</tr>
<tr>
<td>Speaking</td>
<td>Against</td>
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<tr>
<td>Waive Speaking</td>
<td>Against</td>
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<tr>
<td>Representing</td>
<td>Collier Resources Company</td>
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<td>Lobbyist registered with Legislature</td>
<td>Yes</td>
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</table>

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The Florida Senate

APPEARANCE RECORD

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<thead>
<tr>
<th>Date</th>
<th>3/7/17</th>
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<tbody>
<tr>
<td>Bill Number</td>
<td>532</td>
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<tr>
<td>Topic</td>
<td>Pollution Notification</td>
</tr>
<tr>
<td>Name</td>
<td>David Cullen</td>
</tr>
<tr>
<td>Address</td>
<td>1624 University Pkwy #286 Sarasota, FL 34237</td>
</tr>
<tr>
<td>Phone</td>
<td>941-323-2464</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:cullenasea@outlook.com">cullenasea@outlook.com</a></td>
</tr>
<tr>
<td>Speaking</td>
<td>For</td>
</tr>
<tr>
<td>Representing</td>
<td>Sierra Club Florida</td>
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<td>Appearing at request of Chair</td>
<td>Yes</td>
</tr>
<tr>
<td>Lobbyist registered with Legislature</td>
<td>Yes</td>
</tr>
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</table>

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S-001 (10/14/14)
<table>
<thead>
<tr>
<th>Meeting Date</th>
<th>3-7-17</th>
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<tbody>
<tr>
<td>Topic</td>
<td>Public Notification of Pollution</td>
</tr>
<tr>
<td>Name</td>
<td>Ryan Smart</td>
</tr>
<tr>
<td>Job Title</td>
<td>President</td>
</tr>
<tr>
<td>Address</td>
<td>305 N. Monroe St.</td>
</tr>
<tr>
<td></td>
<td>Tallahassee, FL 32301</td>
</tr>
<tr>
<td>Phone</td>
<td>850-222-6277</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:rsmart@1000friends.org">rsmart@1000friends.org</a></td>
</tr>
<tr>
<td>Speaking</td>
<td>In Support</td>
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<tr>
<td>Representing</td>
<td>1000 Friends of Florida</td>
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<td>Yes</td>
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<tr>
<td>Lobbyist registered with Legislature</td>
<td>Yes</td>
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The Florida Senate

APPEARANCE RECORD

3/7/17

Meeting Date

Topic Pollution Notification

Name Brewster Bevis

Job Title Senior Vice President

Address 516 N. Adams St

Phone 224-7173

Email bbevis@aif.com

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.
Meeting Date 3/7/17

Topic Pollution Reporting

Name NANCY STEPHENS

Job Title

Address 1625 SUMMIT LAKE DRIVE
Street TALLAHASSEE FL 32317
City State Zip 32317

Phone 850 456 1234

Email nancy@stephenson.com

Speaking: □ For □ Against □ Information
Waive Speaking: □ In Support □ Against
(The Chair will read this information into the record.)

Representing MANUFACTURERS ASSOCIATION OF FLORIDA

Appearing at request of Chair: □ Yes □ No
Lobbyist registered with Legislature: □ Yes □ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

S-001 (10/14/14)
March 7, 2017

Meeting Date

Pollution Nottie

Topic

David Childs

Name

Counsel

Job Title

119 S. Monroe St, Suite 300

Address

Tallahassee, FL 32301

Phone 222-7500

Email DC CHILDs@1FLS.LAG.com

Address

Speaking: For [ ] Against [ ] Information

Representing Florida Chamber of Commerce

Appearing at request of Chair: [ ] Yes [ ] No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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Bill Number (if applicable)

Amendment Barcode (if applicable)

Lobbyist registered with Legislature: [ ] Yes [ ] No
The Florida Senate

APPEARANCE RECORD

3/7/17

Meeting Date

S532
Bill Number (if applicable)

883586
Amendment Barcode (if applicable)

Topic Notification of Pollution

Name LARRY CURTIN

Job Title Attorney

Address 315 S, Calhoun St, Ste 600

Street TLH

City

State FL

Zip 32301

Phone 850-425-5678

Email LarryCurtil@hklaw.com

Speaking: ☐ For ☐ Against ☐ Information

Waive Speaking: ☐ ☐ 

Representing Helena Chemical Co.

Appearing at request of Chair: ☐ Yes ☐ No

Lobbyist registered with Legislature: ☐ Yes ☐ No

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S-001 (10/14/14)