

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

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

Prepared By: The Professional Staff of the Committee on Rules

**BILL:** CS/CS/CS/SB 1160

**INTRODUCER:** Rules Committee; Environmental Preservation and Conservation Committee; Health Policy Committee; and Senator Bullard

**SUBJECT:** Onsite Sewage Treatment and Disposal Systems

**DATE:** April 17, 2013      **REVISED:** \_\_\_\_\_

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Looke	Stovall	HP	<b>Fav/CS</b>
2.	Toman	Yeatman	CA	<b>Favorable</b>
3.	Hinton	Uchino	EP	<b>Fav/CS</b>
4.	Looke	Phelps	RC	<b>Fav/CS</b>
5.				
6.				

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

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|------------------------------|-------------------------------------|---|
| A. COMMITTEE SUBSTITUTE..... | <input checked="" type="checkbox"/> | Statement of Substantial Changes        |
| B. AMENDMENTS.....           | <input type="checkbox"/>            | Technical amendments were recommended   |
|                              | <input type="checkbox"/>            | Amendments were recommended             |
|                              | <input type="checkbox"/>            | Significant amendments were recommended |

**I. Summary:**

CS/CS/CS/SB 1160 amends s. 381.0065, F.S., to:

- Authorize inspection reports for engineer-designed onsite sewerage treatment and disposal systems (OSTDS) and aerobic treatment units (ATU) to be submitted electronically to the Department of Health (DOH);
- Strike the requirement that the technical review advisory panel assist the DOH in development of performance criteria applicable to engineer-designed OSTDS;
- Clarify that property owners of owner-occupied single-family residences may be approved and permitted by the DOH as a maintenance entity for their own engineer-designed OSTDS or ATU system upon written certification from the manufacturer that they have received training on the proper installation and maintenance of their own engineer-designed OSTDS or ATU system;
- Clarify that maintenance entity service contracts must conspicuously disclose that property owners of owner-occupied single-family residences have the right to maintain their own engineer-designed OSTDS or ATU system and are exempt from contractor registration requirements for performing construction, maintenance, or repairs on an own engineer-designed OSTDS or ATU system, but are subject to all permitting requirements;

- Provide that a septic tank contractor licensed under ch. 489, part III, F.S., and approved by the ATU manufacturer must not be denied access to ATU training and spare parts by the manufacturer for maintenance entities;
- Allow component parts for ATUs to be replaced with parts that meet the manufacturer's specifications but are manufactured by others after the original warranty period for the ATU expires;
- Require Monroe County property owners who are not scheduled to be served by a central sewer by December 31, 2015, to comply with certain concentration level standards;
- Provide that an OSTDS that reduces nitrogen concentrations by at least 70 percent, or if the OSTDS system has been tested and certified to reduce nitrogen concentrations by at least 70 percent, is deemed to be in compliance with current nitrogen standards;
- Allow Monroe County property owners that have recently installed OSTDS in areas scheduled to be served by a central sewer system to continue to use the systems until 2020, except if located in special wastewater districts;
- Allow property owners who have paid connection fees or assessments for connection to a central sewer system, in an area scheduled to be served by a central sewer by December 31, 2015, the option of installing a holding tank with a high water alarm until they are able to connect to a central sewer system.

CS/CS/CS/SB 1160 substantially amends s. 381.0065 of the Florida Statutes.

## II. Present Situation:

The Bureau of Onsite Sewage Programs (Bureau), part of the DOH, develops statewide rules and provides training and standardization for county health department employees responsible for issuing permits for the installation and repair of OSTDSs within the state.<sup>1</sup> The Bureau also licenses over 700 septic tank contractors and oversees 2.3 million onsite wastewater systems in Florida.<sup>2</sup>

In Florida, septic systems are referred to as OSTDSs. An OSTDS can contain any one of the following components: a septic tank; a subsurface drainfield; an ATU; a graywater tank; a laundry wastewater tank; a grease interceptor; a pump tank; a waterless, incinerating or organic waste-composting toilet; and a sanitary pit privy.<sup>3</sup> Septic tanks are tanks in the ground that treat sewage without the presence of oxygen. Sewage flows from a home or business through a pipe into the first chamber, where solids settle out. The liquid then flows into the second chamber where anaerobic bacteria, which do not require oxygen, in the sewage break down the organic matter, allowing cleaner water to flow out of the second chamber into a drainfield.<sup>4</sup> Engineers

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<sup>1</sup> The DOH does not permit the use of onsite sewage treatment and disposal systems where the estimated domestic sewage flow from the establishment is over 10,000 gallons per day (gpd) or the commercial sewage flow is over 5,000 gpd; where there is a likelihood that the system will receive toxic, hazardous or industrial wastes; where a sewer system is available; or of any system or flow from the establishment is currently regulated by the DEP. The DEP issues the permits for systems that discharge more than 10,000 gpd.

<sup>2</sup> DOH, Division of Disease Control and Health Protection, *About Us*, <http://www.myfloridaeh.com/about/index.html> (last visited Apr. 6, 2013).

<sup>3</sup> See Department of Environmental Protection (DEP) *Wastewater: Septic Systems*, <http://www.dep.state.fl.us/water/wastewater/dom/septic.htm> (last visited Apr. 6, 2013).

<sup>4</sup> EPA, *Primer for Municipal Wastewater Treatment Systems*, 2004, p. 22, available at [http://water.epa.gov/aboutow/owm/upload/2005\\_08\\_19\\_primer.pdf](http://water.epa.gov/aboutow/owm/upload/2005_08_19_primer.pdf) (last visited Apr. 6, 2013).

licensed in Florida may specially design OSTDS to meet the needs of individual property owners. Engineer-designed OSTDS plans are subject to review by the local county health department and must be certified by the engineer as complying with all requirements pertaining to such system.<sup>5</sup>

### **Aerobic Treatment Units**

ATUs are similar to septic tanks, except that air is introduced and mixed with the wastewater inside the tank.<sup>6</sup> Aerobic bacteria, which require oxygen, consume the organic matter in the sewage.<sup>7</sup> The effluent discharge from an aerobic system is typically released through a drainfield or may be disinfected and discharged directly into surface water.<sup>8</sup>

ATUs require the removal and disposal of solids that accumulate in the tank. Therefore, routine maintenance is necessary for them to function properly. The National Sanitation Foundation requires ATU manufacturers to provide an initial two-year warranty with two inspections per year.<sup>9</sup> According to the DOH analysis, there are 11,600 ATUs in operation in Florida, 8,770 of which are in four counties: Brevard, Charlotte, Franklin, and Monroe.<sup>10</sup>

Pursuant to s. 381.0065, F.S., and Rule 64E-6.012, F.A.C., owners of ATUs are required to enter into a maintenance entity service agreement with a maintenance entity that is permitted by the DOH. That agreement must initially be for a period of at least two years and subsequent maintenance agreement renewals must be for at least one-year periods for the life of the system. The maintenance entity must obtain a system operating permit from the DOH for each ATU under service contract. The maintenance entity, which sets the fee for service contracts, must inspect each ATU at least twice each year and report quarterly to the DOH the number of ATUs inspected and serviced.

Furthermore, maintenance entities are required to provide documentation that they have been trained by the ATU manufacturer, which sets the maintenance requirements, and have access to required manuals and spare parts. Maintenance entities are also required to be registered as either state-licensed septic tank contractors or state-licensed plumbers.

Homeowners are exempt from the requirement that a person may not contract to construct, modify, alter, repair, service, abandon, or maintain any portion of an OSTDS without being registered under part III of ch. 489, F.S.,<sup>11</sup> but the homeowner must be permitted as a maintenance entity by the DOH and be trained and certified by the manufacturer. The annual maintenance entity permit fee is \$25.

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<sup>5</sup> Rules 64E-6.003 and 6.004, F.A.C.

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

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

<sup>8</sup> *Id.*

<sup>9</sup> The National Sanitation Foundation is an “independent, not-for-profit organization that provides standards development, product certification, auditing, education, and risk management for public health and the environment.” See [http://www.nsf.org/business/about\\_NSF/](http://www.nsf.org/business/about_NSF/) (last visited Apr. 6, 2013).

<sup>10</sup> DOH, *Senate Bill 1160 Analysis* (Feb. 27, 2013) (on file with the Senate Committee on Environmental Preservation and Conservation).

<sup>11</sup> Section 381.0065(4), F.S.

## Florida Keys Area of Critical State Concern

In 1972, the Legislature adopted the Environmental Land and Water Management Act, which provided the basis for the state to designate an Area of Critical State Concern. To be designated, an area must contain, or have a significant impact upon, environmental or natural resources of regional or statewide importance where uncontrolled private or public development would cause substantial deterioration of such resources.<sup>12</sup>

In 1979, Monroe County, including its municipalities and the Florida Keys, was designated as an Area of Critical State Concern pursuant to the “Florida Keys Area Protection Act.”<sup>13</sup> The legislative intent was to establish a land use management system for the Florida Keys that would:

- Protect the natural environment and improve the near shore water quality;
- Support a diverse economic base that promotes balanced growth in accordance with the capacity of public facilities;
- Promote public land acquisition and ensure that the population of the Florida Keys can be safely evacuated;
- Provide affordable housing in close proximity to places of employment; and
- Protect property rights and promote coordination among governmental agencies that have permitting jurisdiction.

In 1996, Rule 28-20, F.A.C., was adopted. The rule contained a Work Program that, when complete, would improve water quality and better protect habitats for threatened and endangered species, and resolve other challenges. Of particular concern was the declining water quality of the near shore environment due to a lack of central sewer facilities, the loss of habitat for state and federally listed endangered species, public safety in the event of hurricanes, and a deficit of affordable housing.<sup>14</sup>

Concerns about water quality resulted in legislative action. Chapter 2010-205, Laws of Florida, required that by December 2015 all sewage disposal in the Florida Keys must be upgraded to meet advanced wastewater treatment standards that reduce the amount of nitrogen, phosphorus, biological oxygen demand and total suspended solids.<sup>15</sup> As a result, when the construction of the central sewage system is concluded, approximately 23,000 septic tanks will be eliminated.<sup>16</sup> The bond financing in the Save our Everglades Program, approved by the Legislature in 2012, and the extension of the Monroe County Infrastructure Sales Tax will provide the foundation to complete the central sewer by 2015.

## Nitrogen Reduction

In 2008 the Legislature directed the DOH to conduct a six-year study to develop passive strategies for nitrogen reduction for OSTDS. Regardless of the source, excessive nitrogen has negative effects on public health and the environment. The project is in its fourth year and is

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<sup>12</sup> Section 380.05(2)(a), F.S.

<sup>13</sup> Section 380.0552(3), F.S.

<sup>14</sup> Florida Department of Economic Opportunity, *Florida Keys Area of Critical State Concern Annual Report*, p. 11, 2012, available at [www.floridajobs.org/fdcp/dcp/acsc/Files/2012FLKeysReport.pdf](http://www.floridajobs.org/fdcp/dcp/acsc/Files/2012FLKeysReport.pdf) (last visited Apr. 6, 2013).

<sup>15</sup> Section 381.0065(4)(l), F.S.

<sup>16</sup> See *supra* note 13.

within the original \$5.1 million budget. The final phase of the project is from 2013 to 2015. Project tasks will be to complete monitoring and other field activities, perform additional testing as deemed appropriate by the Legislature, and make final reporting recommendations on onsite sewage nitrogen reduction strategies for Florida's future.<sup>17</sup>

Current law requires OSTDSs to cease discharge by December 31, 2015, or comply with the DOH rules and provide the level of treatment that, on a permitted annual average basis, produces an effluent that contains no more than the following concentrations:<sup>18</sup>

- Biochemical Oxygen Demand of 10 mg/l;
- Suspended Solids of 10 mg/l;
- Total Nitrogen of 10 mg/l; and
- Total Phosphorus of 1 mg/l.

Tests performed by the nitrogen reduction study have produced results of reduction in total nitrogen of over 95 percent with a final effluent concentration of 2.6 mg/l or less for several of the systems.<sup>19</sup>

### III. Effect of Proposed Changes:

**Section 1** of the CS amends s. 381.0065, F.S., to:

- Subject all OSTDS designed by a professional engineer to DOH regulations, rather than only OSTDS designed by a professional engineer for single-family residences;
- Strike the requirement that the technical review advisory panel assist the DOH in development of performance criteria applicable to engineer designed OSTDS;
- Provide that inspection reports of engineer-designed OSTDS and ATUs may be submitted electronically to the DOH;
- Clarify that property owners of owner-occupied single-family residences may be approved and permitted by the DOH as maintenance entities for their own engineer-designed OSTDS or their own ATU system under certain conditions;
- Clarify that engineer-designed OSTDS and ATU maintenance entity service agreements must conspicuously disclose that property owners of owner-occupied single-family residences have the right to maintain their own systems and are exempt from contractor registration requirements, but are subject to all permitting requirements;
- Require property owners to obtain biennial system operating permits for each engineer-designed OSTDS instead of the maintenance entity;
- Require property owners to obtain biennial operating permits for each ATU;
- Provide that a septic tank contractor licensed under part III of ch. 489, F.S., and approved the ATU manufacturer may not be denied access to ATU training and spare parts by the manufacturer for maintenance entities; and
- Allow component parts for ATUs to be replaced with parts that meet the manufacturer's specifications but are manufactured by others after the original warranty period for the ATU expires.

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<sup>17</sup> See DOH, *Status Report on Phase II and Phase III of the Florida Onsite Sewage Nitrogen Reduction Strategies Study*, Feb. 1, 2013, <http://www.myfloridaeh.com/ostds/research/Nitrogen.html> (last visited on Apr. 6, 2013).

<sup>18</sup> Section 381.0065(4)(l), F.S.

<sup>19</sup> *Supra* note 16.

- For property owners with OSTDSs in Monroe County, there are several situations that may apply, depending on certain factors:
  - If a property owner lives in an area that is scheduled to be served by a central sewer system by December 31, 2015:
    - If they have paid connection fees or assessments to connect to a central sewer system, they may install a holding tank with a high water alarm to use until they connect to the central sewer;
    - They may also keep their existing systems until they connect to the central sewer system provided the existing tanks are pumped, inspected and certified as being watertight and free of defects in accordance with DOH rule; and
    - They have to cease using their OSTDSs when they are able to connect to the central sewer system.
  - If a property owner lives in an area that is not scheduled to be served by a central sewer system by December 31, 2015, the property owner must meet DOH effluent standards, for:
    - Biochemical Oxygen Demand (CBOD5) of 10 mg/l;
    - Suspended Solids of 10 mg/l;
    - Total nitrogen of 10 mg/l or a reduction in nitrogen of at least 70 percent or a system that has been tested and certified to reduce nitrogen concentrations by at least 70 percent; and
    - Total phosphorous of 1 mg/l.
- If a property owner uses an OSTDS that meets the effluent concentration thresholds and was installed after July 1, 2010, in unincorporated Monroe County, the property owner is not required to connect to a central sewer until December 31, 2020, except if located in special wastewater districts.

**Section 2** provides an effective date of July 1, 2013.

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

##### A. Municipality/County Mandates Restrictions:

None.

##### B. Public Records/Open Meetings Issues:

None.

##### C. Trust Funds Restrictions:

None.

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

##### A. Tax/Fee Issues:

None.

**B. Private Sector Impact:**

CS/SB 1160 may have a positive fiscal impact on owners with engineer-designed OSTDS and ATU systems by allowing them to maintain their own systems; however, homeowners may see an up-front cost for the training necessary to maintain their own systems.

An ATU requires a significant financial commitment to install and operate over the life of the system. Connecting to a central sewer system is also a significant investment. For residents who have installed an ATU since July 1, 2010, the CS provides assurance that they may continue to operate their ATUs until December 31, 2020.

Owners with conventional OSTDSs do not have to meet the heightened effluent standards for biological oxygen demand, suspended solids, nitrogen, and phosphorous if they will be connected to centralized sewer by December 31, 2015. A property owner will also have the option of installing a holding tank with a high water alarm. Savings are indeterminate because pumping costs for a holding tank can be high, but it expands the options available to property owners.

**C. Government Sector Impact:**

The DOH would have to amend Rule 64E-6.012, F.A.C., to comply with the changes in the CS. The DOH estimates the cost of notices and meetings will be \$5,000, which can be absorbed within its existing resources.

**VI. Technical Deficiencies:**

None.

**VII. Related Issues:**

None.

**VIII. Additional Information:****A. Committee Substitute – Statement of Substantial Changes:**

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

**CS/CS/CS by Rules on April 17, 2013:**

- Specifies that OSTDS installed after July 1, 2010, in unincorporated Monroe County, excluding special wastewater districts, are not required to connect to central sewer systems until December 31, 2020.
- Specifies that septic tank contractors approved by ATU manufacturers may not be denied access to ATU system training and spare parts.
- Subjects all OSTDS designed by a professional engineer to DOH regulations, rather than only OSTDS designed by a professional engineer for single-family residences;
- Strikes the requirement that the technical review advisory panel assist the DOH in development of performance criteria applicable to engineer designed OSTDS;

- Provides that inspection reports of engineer-designed OSTDS may be submitted electronically to the DOH;
- Clarifies that property owners of owner-occupied single-family residences may be approved and permitted by the DOH as a maintenance entity for their own engineer designed OSTDS upon written certification from the manufacturer that they have received training on the proper installation and maintenance of engineer-designed OSTDS;
- Clarifies that maintenance entity service contracts must conspicuously disclose that property owners of owner-occupied single-family residences have the right to maintain their own engineer-designed OSTDS and are exempt from contractor registration requirements for performing construction, maintenance, or repairs on an engineer designed OSTDS, but are subject to all permitting requirements; and
- Requires property owners to obtain biennial system operating permits for each engineer designed OSTDS and the DOH to inspect each engineer-designed OSTDS at least annually.

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

- Removes a provision concerning development orders in the Florida Keys;
- Adds a provision that a reduction in nitrogen of at least 70 percent from OSTDSs in Monroe County is deemed in compliance with DOH rules concerning total nitrogen concentrations in OSTDS effluent; and
- Provides that in areas scheduled to be served by central sewer by December 31, 2015, property owners may install a holding tank with a high water alarm until they connect to the central sewer if they have paid connection fees or assessments for connection to the central sewer.

**CS by Health Policy Committee on March 20, 2013:**

The CS substantially amends SB 1160 to:

- Provide that inspection reports may be submitted electronically to the DOH;
- Clarify that property owners of an owner-occupied single-family residence may be approved and permitted by the DOH as a maintenance entity for their own systems upon written certification from the manufacturer that they have received training on the proper installation and maintenance of the unit;
- Clarify that maintenance entities must conspicuously disclose that property owners of owner-occupied single-family residences have the right to maintain their own systems and are exempt from contractor registration requirements for performing construction, maintenance, or repairs on their systems, but are subject to all permitting requirements;
- Provide that a septic tank contractor licensed under part III of ch. 489, F.S., must not be denied the access to training and spare parts by the manufacturer for maintenance entities;
- Allow component parts for ATUs to be replaced with parts that meet the manufacturer's specifications but are manufactured by others after the original warranty period for the ATU expires;



- Exclude Monroe County property owners who are scheduled to be served by a central sewer by December 31, 2015, from the requirement to comply with certain concentration level standards;
- Provide that a tested and certified OSTDS that reduces nitrogen concentrations by at least 70 percent is deemed to be in compliance with current nitrogen standards.
- Allow Monroe County property owners that have recently installed OSTDSs in areas scheduled to be served by central sewer systems to continue to use the systems until 2020; and
- Provide for the extension of building permits for property owners within the Florida Keys Area of Critical State Concern.

B. Amendments:

None.