HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/HB 687 Land Application of Septage
SPONSOR(S): Agriculture & Natural Resources Subcommittee; Drake
TIED BILLS: None **IDEN./SIM. BILLS:** SB 648

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Agriculture & Natural Resources Subcommittee	12 Y, 0 N, As CS	Moore	Blalock
2) State Affairs Committee	12 Y, 3 N	Moore, R.	Camechis

SUMMARY ANALYSIS

There are approximately 2.6 million onsite sewage treatment and disposal systems (OSTDSs or septic tanks) in the state, serving approximately 30 percent of the population. Each year, nearly 100,000 OSTDSs are pumped out, generating 100 million gallons of septage. Septage is the mixture of sludge, fatty materials, human feces, and wastewater removed during the pumping or cleaning of an OSTDS.

Current law prohibits land application of septage from OSTDSs effective January 1, 2016. However, reasonable alternative disposal options are limited to handle the septage that is currently land applied. In addition, the Department of Environmental Protection is currently conducting a study of water quality impacts of permitted land application sites. The study is projected to be completed within two years.

The bill extends the effective date of the prohibition against the land application of septage from OSTDSs from January 1, 2016, to January 1, 2018.

The bill delays the indeterminate fiscal impact on the Department of Health resulting from the loss of permit revenues. The bill delays the potential indeterminate negative fiscal impact on septic tank pumpers, septage haulers, and OSTDS owners resulting from increased costs of treating and disposing of septage using alternative methods.

The bill has an effective date of July 1, 2015.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Present Situation

Each Floridian generates approximately 100 gallons of domestic wastewater[1] each day.[2] This wastewater is collected, treated, and managed by onsite treatment and disposal systems (OSTDSs or septic systems),[3] which are permitted by the Department of Health (DOH), or by centralized wastewater treatment facilities (WWTFs), which are permitted by the Department of Environmental Protection (DEP), to protect public health, water quality, recreation, and fish and wildlife.[4]

There are approximately 2.6 million OSTDSs in the state, serving approximately 30 percent of the population.[5] Each year, nearly 100,000 OSTDSs are pumped out, generating 100 million gallons of septage.[6] Septage is the mixture of sludge, fatty materials, human feces, and wastewater removed during the pumping or cleaning of an OSTDS.[7]

Roughly 40 percent of the septage removed is treated at a DOH-permitted septage treatment facility and then applied to a DOH-permitted land application site.[8] DOH permits 88 land application sites and 90 septage treatment facilities throughout the state.[9] Septage that is not treated at a septage treatment facility and applied to land is treated at a WWTF or disposed of in a Class I landfill.[10]

Septage received at a DOH-permitted septage treatment facility is screened and treated with lime to raise the pH to 12 for a minimum of two hours or to 12.5 for thirty minutes.[11] Septage land application rates are limited by nitrogen content and, if applicable, phosphorous content.[12] Application is limited to sod farms, pasture lands, forests, highway shoulders and medians, plant nurseries, land reclamation projects, and soils used for growing human food chain crops (e.g. hay, silage).[13]

In 2010, the Legislature passed SB 550, which banned land application of septage from OSTDSs after January 1, 2016, and required DOH, in consultation with DEP, to provide a report, by February 1, 2011, to the Governor, the Senate President, and the House Speaker, recommending alternative methods to

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[1] Domestic wastewater is defined, in rule 62-600.200(25), F.A.C., as the wastewater derived principally from dwellings, business buildings, institutions, and the like; sanitary wastewater; sewage.
[2] DEP, *Domestic Wastewater*, http://www.dep.state.fl.us/water/wastewater/dom/index.htm (last visited March 2, 2015).
[3] An OSTDS is defined, in section 381.0065(2)(k), F.S., as a system that contains a standard subsurface, filled, or mound drainfield system; an aerobic treatment unit; a graywater system tank; a laundry wastewater system tank; a septic tank; a grease interceptor; a pump tank; a solids or effluent pump; a waterless, incinerating, or organic waste-composting toilet; or a sanitary pit privy that is installed or proposed to be installed beyond the building sewer on land of the owner or on other land to which the owner has the legal right to install a system. The term includes any item placed within, or intended to be used as a part of or in conjunction with, the system, but does not include package sewage treatment facilities and other treatment works regulated by DEP under chapter 403, F.S.
[4] Section 381.0065, F.S.; Section 403.087, F.S.; DEP, *Domestic Wastewater,* http://www.dep.state.fl.us/water/wastewater/dom/index.htm (last visited March 2, 2015).
[5] DOH, *Onsite Sewage*, http://www.floridahealth.gov/environmental-health/onsite-sewage/index.html (last visited March 2, 2015).
[6] DOH's *Report on Alternative Methods for the Treatment and Disposal of Septage*, available at http://www.floridahealth.gov/environmental-health/onsite-sewage/_documents/septage_alternatives.pdf.
[7] Section 381.0065(2)(n), F.S.
[8] DOH's *Report on Alternative Methods for the Treatment and Disposal of Septage*, available at http://www.floridahealth.gov/environmental-health/onsite-sewage/_documents/septage_alternatives.pdf
[9] Conversation with DOH staff on March 11, 2015.
[10] DOH's *Report on Alternative Methods for the Treatment and Disposal of Septage*, available at http://www.floridahealth.gov/environmental-health/onsite-sewage/_documents/septage_alternatives.pdf.
[11] Rule 64E-6.010(7), F.A.C.
[12] Id.
[13] Id.

establish enhanced treatment levels for land application of septage.[14] The report was required to include:

- A schedule for the reduction in land application;
- Appropriate treatment levels;
- Alternative methods for treatment and disposal;
- Enhanced application site permitting requirements, including any requirements for nutrient management plans;
- The range of costs to local governments, affected businesses, and individuals for alternative treatment and disposal methods; and
- Any recommendations for legislation or rule authority needed to reduce land application of septage.[15]

On February 1, 2011, DOH's Bureau of Onsite Sewage issued its report, which contained the following findings:[16]

- The benefits of treating septage at WWTFs include making use of available WWTFs that have aeration and/or solids handling capacity, and having a centralized waste treatment operation. However, only 60 of the 2,000 WWTFs in Florida have the capacity to treat septage, resulting in approximately 70 percent of the state's counties not having an available WWTF located within their boundaries. Additionally, accepting septage at a WWTF has the potential to upset wastewater treatment processes, making septage receiving facilities (e.g. holding tanks) at WWTFs desirable, resulting in increased operation and maintenance requirements and costs. Also, some WWTFs choose not to accept grease with septage, which necessitates the transport of grease for separate treatment land application.[17]
- The benefits of septage disposal at Class I landfills include increased microbial activity within the landfill, which results in increased waste decomposition and more rapid waste stabilization. Disposal also offers containment, management of potential contaminants, and requires less area than land application. However, in order for septage to be accepted at a landfill it must be dewatered, to approximately 12 percent total solids, and the effluent from dewatering is then sent to a WWTF, which increases costs. Additionally, septage, being a wet waste stream, may create instability (e.g. differential settlement and slope instability) of the landfill, and there may be increased difficulty in operating compaction equipment due to a slick working surface.[18]
- The state could require further treatment of septage at septage treatment facilities, but the current requirement of lime stabilization for two hours at a pH of 12 meets federal regulations.[19]
- Enhancements to current land application practices could include requiring third-party oversight of septage treatment facilities and land application sites, such as:
    - Having a Class C WWTF Operator visit to oversee operations;
    - Increasing the frequency of DOH inspections;
    - Establishing regional DOH inspections; and
    - Limiting a land application site to use by one septage applier.

  In addition, enhancements to current operational procedures could include:
    - Metering of septage received at treatment facilities;
    - Requiring larger stabilization and holding tanks at treatment facilities;
    - Requiring longer treatment exposure times and post-treatment holding times;
    - Requiring electronic pH meters to replace testing with paper strips;
    - Requiring sampling of stabilized septage;
    - Tracking yearly nutrient loading based on septage sampling; and
    - Requiring annual soil sampling of active land application sites.[20]

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[14] Chapter 2010-205, Laws of Fla.
[15] Id.
[16] DOH's *Report on Alternative Methods for the Treatment and Disposal of Septage*, available at http://www.floridahealth.gov/environmental-health/onsite-sewage/_documents/septage_alternatives.pdf.
[17] Id.
[18] Id.
[19] Id.
[20] Id.

In addition, DEP is currently conducting a study focusing on the leaching potential of septage land application sites to groundwater.[21] Up-gradient monitoring and monitoring tracer analysis are being used to differentiate water quality impacts of septage application, adjacent land use activities, and past and ongoing fertilizer applications at land application sites.[22] The study is projected to be completed within two years.[23]

Effect of Proposed Changes

The bill amends s. 381.0065, F.S., to extend the effective date of the prohibition against the land application of septage from OSTDSs from January 1, 2016, to January 1, 2018.

B. SECTION DIRECTORY:

Section 1. Amends s. 381.0065, F.S., relating to land application of septage.

Section 2. Provides an effective date of July 1, 2015.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

DOH currently issues permits for 88 land application sites and 90 septage treatment facilities, which have annual permit fees associated with these operations. If the prohibition takes effect in 2016, DOH will lose revenue by no longer permitting these operations.

2. Expenditures:

If the prohibition takes effect in 2016, there will be an indeterminate reduction in DOH's expenditures from no longer permitting or inspecting these operations.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The land application of septage from OSTDSs provides a method for disposal that is typically lower in cost than alternative methods (e.g. treatment at a WWTF or disposal at a landfill). When the prohibition on land application takes effect in 2016, septic tank pumpers and septage haulers will have to use alternative methods, which typically cost more than land application due to increases in driving distance and disposal fees. Increased costs associated with the use of alternative methods may result in higher pumpout costs for OSTDS owners. By extending the effective date of the prohibition on the land application of septage, the bill also delays the potential indeterminate negative fiscal impact on the private sector.

D. FISCAL COMMENTS:

None.

[21] DEP's analysis on file with Agriculture & Natural Resources Subcommittee staff.
[22] Id.
[23] Id.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

The bill does not appear to require counties or municipalities to take an action requiring the expenditure of funds, reduce the authority that counties or municipalities have to raise revenue in the aggregate, nor reduce the percentage of state tax shared with counties or municipalities.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

None.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

On March 10, 2015, the Agriculture & Natural Resources Subcommittee adopted one amendment that extended the effective date of the prohibition against the land application of septage from OSTDSs from January 1, 2016, to January 1, 2018.

On March 19, 2015, the bill passed the State Affairs Committee (SAC) without amendment. This analysis is drafted to the bill as passed by the SAC.