

Handbook of Florida Water Regulation: On-Site Sewage Treatment and Disposal¹

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Preface

This handbook is designed to provide an accurate, current, and authoritative summary of the principal federal and state (Florida) laws that directly or indirectly relate to agriculture. This handbook provides a basic overview of the many rights and responsibilities that farmers and farmland owners have under both federal and state laws as well as the appropriate contact information to obtain more detailed information. However, the reader should be aware that because the laws, administrative rulings, and court decisions on which this handbook is based are subject to constant revision, portions of this publication could become outdated at any time. Several details of cited laws are also left out due to space limitations.

This handbook is distributed with the understanding that the authors are not engaged in rendering legal or other professional advice, and the information contained herein should not be regarded as a substitute for professional advice. This handbook is not all inclusive in providing information to achieve compliance with the federal and state laws and regulations governing water protection. For these reasons, the use of these materials by any person constitutes an agreement to hold harmless the authors, the Florida Cooperative Extension Service, the Institute of Food and Agricultural Sciences, and the University of Florida for any liability claims, damages, or expenses that

may be incurred by any person as a result of reference to or reliance on the information contained in this handbook.

Who Regulates On-Site Sewage Treatment and Disposal?

While the Florida Statutes contain a set of broad guidelines regulating sewage treatment and disposal, the Florida Department of Health (FDOH) is the primary authority for specific, statewide regulations controlling the installation and use of on-site sewage treatment and disposal systems (septic tanks and drain fields).

The installation and use of on-site sewage treatment and disposal systems (OSTDS) also falls under the permit authority of the Florida Department of Environmental Protection (FDEP) and the United States Environmental Protection Agency (EPA), under the Clean Water Act (CWA) and the Safe Drinking Water Act (SDWA). This is the case especially when an OSTDS and/or an OSTDS drain field are installed in a wetland, or when the failure (leaking) of an OSTDS would threaten the quality of ground or surface water with contamination, and make public well water unsafe for human consumption.

EPA can regulate an OSTDS, under SDWA, as a Class Five Well (which is defined and regulated by Section 144 of the Code of Federal Regulations) and require it to meet

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Underground Injection Control (UIC) Program requirements if either one of the following conditions is met:

1. The OSTDS, regardless of size, receives any amount of industrial or commercial wastewater
2. The OSTDS receives solely sanitary waste from multiple family residences or a nonresidential establishment and has the capacity to serve 20 or more persons per day (also known as large capacity on-site sewage treatment and disposal systems)

If either condition is met, then the owners or operators of the OSTDS must meet state requirements and both federal requirements for Class Five wells as follows:

1. Obey the non-endangerment performance standard that is set to protect drinking water quality. The non-endangerment performance standard prohibits any injection that allows the movement of fluids containing any contaminant into underground sources of drinking water if the presence of the contaminant(s) may cause a violation of any primary drinking water regulation or adversely affect public health
2. Provide inventory information (including facility name and location, legal contact name and address, ownership information, nature and type of injection wells, and operating status of the injection wells) to the state or EPA regional UIC Program

The waste disposal rules of FDEP will apply in the following situations:

- The estimated volume of *domestic* sewage to be processed exceeds 10,000 gallons per day
- The estimated volume of *commercial* sewage to be processed exceeds 5,000 gallons per day
- The water contains or will contain *industrial or hazardous* waste

If the system falls into one of these categories, FDEP will likely require a separate permit and impose further restrictions on the system. In addition to the statewide rules, local governments may have more stringent rules and requirements for permitting and regulating the disposal system.

Are On-Site Sewage Treatment and Disposal Systems Acceptable?

The state does not encourage the use of on-site sewage treatment and disposal systems when the use of public or investor-owned sewage systems is readily available. Both the statutes and FDOH rules require the use of public or investor-owned sewage systems in areas where they are readily available when the plumbing of a home or business is actually capable of being connected to these systems.

Unless the system is authorized by the utility and is being used to dispose only greywater, it must be connected to a public sewage system within one year from the date such a public system becomes available in the area.

Greywater and *blackwater* are defined as follows:

- Greywater is residential wastewater from the bathtub, shower, lavatory, laundry, and sink, except kitchen sink waste
- Blackwater is that part of domestic sewage carried off by toilets, urinals, and kitchen drains

Where Must the OSTDS Be Placed?

The location of the OSTDS is a key factor in determining the potential for groundwater damage as follows:

The OSTDS must be placed at least 75 feet from private potable wells, multi-family water wells, and surface waters, including lakes, bays, and normally wet drainage ditches.

The OSTDS must be placed 100 feet from public potable wells serving a residential or nonresidential establishment having a total sewage flow of less than or equal to 2,000 gallons a day.

The OSTDS must be placed 200 feet from public potable wells serving a residential or nonresidential establishment having a total sewage flow of greater than 2,000 gallons a day.

The OSTDS cannot be placed under buildings. It must be placed five feet from building foundations, mobile home walls, swimming pool walls, or property lines except where property lines abut utility easements that do not contain underground utilities or where recorded easements are specifically provided for the installation of systems for service to more than one lot or property owner.

1. The OSTDS must be placed 50 feet from non-potable wells.
2. The OSTDS must be placed 10 feet from a storm sewer pipe.
3. The OSTDS must be placed 11 feet from water storage tanks in contact with the ground or potable water lines unless such lines are sealed with a water proof sealant within a sleeve of similar material pipe to a distance of at least 10 feet from the nearest portion of the system. If a water line is sleeved in a sealant material, that particular sleeved water line cannot be located within 24 inches of the OSTDS. Potable water lines within 5 feet of the drain-field must not be located at an elevation lower than the drain-field absorption surface. Backflow preventers or check valves must be installed on non-potable water lines located with 24 inches of a water system so as to prevent contamination.
4. The OSTDS must be placed 75 feet from the mean high-water line of a tidal surface water body.
5. The OSTDS must be placed 75 feet from the mean annual flood line of a permanent non-tidal surface water body.
6. The OSTDS must be placed 15 feet from the design high-water line of retention areas, detention areas, or swales designed to contain standing or flowing water for less than 72 hours after a rainfall.
7. The OSTDS must be placed 15 feet from the design high-water level of normally dry drainage ditches and normally dry individual lot stormwater retention areas.
8. The OSTDS must be placed 15 feet from groundwater interceptor drains.
9. New fill soil used to install mounded septic systems or replace unsatisfactory naturally existing soils (e.g., unsettled ground) is required to be slightly limited (soil with generally favorable properties for easy alteration to a desired land use) in nature and compacted to the density of the surrounding soil.
10. Special standards apply to the placement of systems in limestone soil, which is particularly common in South Florida.

The land use zoning of the area where the OSTDS is to be installed is also crucial. If an area is zoned for industry or manufacturing, FDOH will closely monitor the system to

ensure that it receives no toxic or hazardous wastes. Additionally, the system will not be permitted if a public sewage system is available.

The size of the tank and drain field is also prescribed by the rules, which list the minimum sizes of tanks required for every size of residence or other building. The size regulations are based on the amount of waste FDOH estimates each type of building will generate. The size and characteristics of the land on which the tank and drain field are to be installed is also prescribed by the rules which state that the land must be at least twice the size of the drain field itself.

How Should the OSTDS Be Maintained?

The owner of the property is responsible for maintenance and upkeep of the system. It is important to note that the OSTDS must be operated under the terms of the rule and permit under which it was approved. The owner may not make any changes to the structure/system or increase sewage flow without approval from the local health department. Under FDOH rules, the owner should have the level of the tank checked a minimum of once every three years by a licensed septic tank contractor. A licensed contractor should also perform any necessary maintenance to the system. If garbage grinders or commercial sewage are being discharged into a tank, the owner needs to have the system inspected by a licensed septic tank contractor or plumber once a year. Both the statute and the rules prohibit the use of organic chemical solvents, toxic or hazardous chemicals, or petroleum products to degrease or de-clog the system. A licensed contractor must be issued an annual service permit prior to the removal of septage from any OSTDS.

What Are the Procedures for Septic Tank Abandonment?

A permit and fee are required from FDOH to abandon a septic tank, and these steps must be followed:

1. The tank should be pumped out
2. The bottom should be opened or ruptured to prevent water retention
3. The tank should be filled with clean sand or other suitable material and completely covered with soil
4. An inspection of the system abandonment shall be conducted by FDOH or by the local utility or plumbing authority performing the system abandonment

What Permits and Fees Are Required for On-Site Sewage Systems?

FDOH requires a permit for the installation, operation, repair, alteration, modification, replacement, or abandonment of all on-site sewage systems. Prior to the issuance of any permit, an application and a site investigation is required on all sites by FDOH, Florida licensed professional engineers, or other authorized persons. FDOH will also require an inspection of the entire septic system before burial.

FDOH attempts to perform all inspections within one working day after being notified that the tank installation is complete. A fee will be collected for the permit, the inspections, and any other necessary services performed by FDOH. Generally, the fees range from \$50 to \$200, but can be as high as \$500 for an application fee for innovative product approval.

It is essential to note that local governments may have separate requirements, including separate permits (e.g., plumbing permits), that may be more stringent than state law or rule. In many cases, the issuance of these permits will be contingent on the applicant having already obtained an FDOH permit.

What Alternative Systems Can Be Used and When?

When approved by FDOH and the county health department, alternative systems may, at the discretion of the applicant, be utilized in circumstances where standard subsurface systems are not suitable or where alternative systems are more feasible. The rules give the individual county health departments as part of FDOH the authority to approve alternative on-site systems such as mounds, gravity sewers, low pressure pipe, and other systems so long as the county feels there will be no adverse effects. However, any approvals of alternative systems must comply with applicable rules and laws. FDOH or the county health department may require the submission of plans prepared by an engineer registered in the state of Florida prior to considering the use of any alternative system. FDOH retains authority to approve the use of temporary measures such as portable toilets as well. FDOH rules also create a Variance Review and Advisory Committee to hear requests for variances. The committee may advise FDOH to grant a variance when it deems strict compliance with the laws and rules governing on-site sewage treatment and disposal

systems cannot be met. However, only FDOH has the authority to grant a variance.

Source

Chapter 381, Florida Statutes, Section 381.0065

Chapter 64E-6, Florida Administrative Code

Contact Information

OSTD Management (see [FE616](#), Contact Agencies)

- S-5, Florida Department of Health (contacting the local county health department may be sufficient)

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