

CHAPTER 62-6
STANDARDS FOR ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS

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Part I
General Provisions except those specific to Parts II and IV

62-6.001 General.

(1) The provisions of Part I (Rules 62-6.001 through 62-6.016, F.A.C.) of this chapter apply to all areas of the state except

where specific provisions in Part II (Rules 62-6.017 through 62-6.0182, F.A.C.), addressing the Florida Keys, or specific provisions in Part IV (Rules 62-6.025 through 62-6.0295, F.A.C.), addressing performance-based treatment systems, exempt or modify compliance with Part I. Part III (Rules 62-6.019 through 62-6.023, F.A.C.) addresses the registration of septic tank contractors and authorization of partnerships and corporations. Part V (Rule 62-6.030, F.A.C.) addresses fees for services throughout the chapter. The provisions of this chapter must be used in conjunction with Chapter 381 and Part III of Chapter 489, F.S.

(2) Structures used or intended for human occupancy, employment or service to the public and locations where people congregate, such as construction sites, fairs, and field locations for agricultural workers shall provide approved wastewater treatment and disposal systems. Except for the provisions of Rule 62-6.0101, F.A.C., permanent structures shall not rely upon the use of holding tanks and portable toilets for wastewater treatment and disposal.

(3) Combination of commercial and domestic sewage into a single system shall require that all the sewage be treated as commercial sewage.

(4) Except as provided for in Section 381.00655, F.S., any existing and prior approved system which has been placed into use and which remains in satisfactory operating condition shall remain valid for use under the terms of the rule and permit under which it was approved. Alterations that change the conditions under which the system was permitted and approved, sewage characteristics or increase sewage flow will require that the owner, or their authorized representative, apply for and receive reapproval of the system by the Department, prior to any alteration of the structure, or system. If an applicant requests that the Department consider the previous structure's or establishment's most recent approved occupancy, the applicant must provide written documentation that the onsite sewage treatment and disposal system was approved by the Department for that previous occupancy.

(a) An applicant will be required to complete an application, and provide a site plan in accordance with rule 62-6.004, F.A.C., to provide information of the site conditions under which the system is currently in use and conditions under which it will be used.

(b) The applicant shall have all system tanks pumped by a permitted septage disposal service. A registered septic tank contractor, state-licensed plumber, person certified under Section 381.0101, F.S., or master septic tank contractor shall determine the tank volume and shall perform a visual inspection of the tank when the tank is empty to detect any observable defects or leaks in the tank. The tank volume shall be obtained from the tank legend or shall be calculated from measured internal tank dimensions for length, width and depth to the liquid level line or from the measured outside dimensions for length and width minus the wall thickness and depth to the liquid level line. For odd shaped tanks and tanks without a legend, metered water flows from the refilling of the tank may be used in lieu of measured inside or outside tank dimensions. The person performing the inspection shall submit the results to the Department as part of the application in accordance with rule 62-6.004, F.A.C.

(c) If a prior approved existing system has been approved within the preceding five years, and the system was determined to be in satisfactory operating condition at that time, a new inspection is not required unless there is a record of failure of the system. If it is determined that a new inspection is not required, only the application fee shall be charged for this application and approval.

(d) If the use of a building is changed or if additions or alterations to a building are made which will increase domestic sewage flow, change sewage characteristics, or compromise the integrity or function of the system, the onsite sewage treatment and disposal system serving such building shall be brought into full compliance with the provisions and requirements of these rules.

1. Proper well setbacks shall be maintained.

2. Prior to any modification of the system, the owner shall apply for and obtain a permit for modification of the system from the Department in accordance with Rule 62-6.004, F.A.C. The permit shall be valid for 18 months from the date of issue. Where building construction has commenced, it shall be valid for an additional 90 days.

3. Necessary site investigations and tests shall be performed at the expense of the owner by either an engineer with soils training who is licensed in the state of Florida pursuant to Chapter 471, F.S., registered septic tank contractors, master septic tank contractors, or persons certified under Section 381.0101, F.S., or Department personnel for the appropriate fee specified in Section 381.0066, F.S.

(e) For residences, flows shall be calculated using new system criteria for bedrooms and building area, including existing structures and any proposed additions. Table I and footnotes shall apply. No part of the existing structure, or the addition to the structure shall be allowed to cover any part of the system. Non-load bearing structures, such as a concrete patio floor, are allowed to cover the septic tank, provided that access to the tank is provided for maintenance. The structure above the septic tank shall have a minimum opening of 225 square inches at each end of the septic tank for access into the tank. The structure shall not be in direct contact with the tank. A barrier of soil or plastic shall be used between the tank and non-load bearing structure. A modification, replacement, or upgrade of an onsite sewage treatment and disposal system is not required for a remodeling addition if a bedroom is

not added. For those residences that add sewage flow, the system shall be required to be altered to meet the following criteria:

1. The septic tank need not be replaced if it is structurally sound and is within one tank size of the required specifications found in Table II, for the proposed structure. An approved outlet filter shall be installed if one is currently not in place. If existing tanks are not within one tank size of the required specifications found in Table II, for the proposed structure, they shall be replaced or supplemented to meet current sizing requirements. If a new tank is installed in series, the resulting configuration must meet the sizing requirements for tanks-in-series in Rule 62-6.013, F.A.C.

2. The Department shall require the existing drainfield to be increased to current rule drainfield size requirements for the proposed estimated sewage flow using the appropriate soil loading rate and sizing criteria for new systems. Where the existing elevation of the bottom surface of the drainfield is less than 24 inches above the wet season high water table, the bottom of the drainfield shall be maintained at the existing separation or a minimum of 12 inches above the wet season high water table, whichever is greater.

3. Where the bottom of the drainfield is less than 12 inches above the wet season high water table, the drainfield shall be brought into full compliance with all new system standards, as long as it is the intent of the applicant to proceed with the addition to the residence.

(f) For commercial establishments, the system shall not be required to be altered if domestic sewage flow is not expected to increase by more than 20% of original design flow or require more than one tank size adjustment. A Department approved outlet filter device shall be installed. Any system which is used to treat and dispose of commercial wastewater shall be brought into full compliance with the provisions and requirements of current rules when there is any increase in sewage flow or increase in waste strength.

(g) These requirements do not authorize a residence or establishment to exceed the lot flow allowances authorized under paragraph 62-6.005(7)(c), F.A.C. Establishments that currently exceed lot flow allowances shall not be allowed to increase sewage flow.

(h) The installation of a laundry system, a gray water system, a grease interceptor, or additional drainfield as a precautionary measure to prolong system functioning of an existing system is considered a modification to the system. Such installation is not a modification if it is associated with an increase in estimated sewage flow or change in sewage characteristics, if the system is in failure or if the existing system is in non-compliance with the terms of the original permit, in which case it will be considered a new system.

(i) If an existing system is disconnected from a structure that was made unusable or destroyed following a disaster, the system may be reconnected to a rebuilt structure per the provisions of Section 381.0065(4)(x), F.S.

(5) The Department Procedure for Voluntary Inspection and Assessment of Existing Systems, May, 2000, herein incorporated by reference (formerly from Department of Health) shall be applied except in situations pertaining to an increase in sewage flow or change in sewage characteristics, or failure of the system. The inspection is designed to assess the condition of a system at a particular moment in time. The inspection will identify obviously substandard systems, for example systems without drainfields. The inspection is not designed to determine precise code compliance, nor provide information to demonstrate that the system will adequately serve the use to be placed upon it by this or any subsequent owner. Nothing in this section shall be construed to limit the amount of detail an inspector may provide at their professional discretion. Persons allowed to perform work under this section shall be master septic tank contractors, registered septic tank contractors, state-licensed plumbers, and persons certified under Section 381.0101, F.S. Department employees are excluded from performing these evaluations. Aerobic treatment units and performance-based treatment systems shall not be evaluated using this criteria, but shall be evaluated by the approved maintenance entity which maintains the unit or system. Nothing in this section restricts the person having ownership of, control of, or use of an onsite sewage treatment and disposal system from requesting a partial inspection. The inspector shall provide the person requesting the inspection a copy of the Department Procedure for Voluntary Inspection and Assessment of Existing Systems and written notice of their right to request an inspection based on part or all of the standards.

(6) Citations issued by the Department shall be on Form DEP 3146, 11/02, Citation for Violation, Onsite Sewage Program/Sanitary Nuisance, hereby incorporated by reference.

(7) Where the Department has adopted a basin management action plan for nutrient total maximum daily loads that includes an onsite sewage treatment and disposal system remediation plan, pursuant to applicable Florida law, the following requirements apply:

(a) Onsite sewage treatment and disposal system permits must incorporate the applicable remediation plan requirements or the requirements of this chapter, whichever are more stringent. The remediation plan requirements of the onsite sewage treatment and

disposal system and requirements of this chapter, whichever are more stringent, are projected to not cause or contribute to the exceedance of the nutrient total maximum daily load established as of the date of the permit application.

(b) The permit application must identify the lot as being subject to a basin management action plan, onsite sewage treatment and disposal system remediation plan. Unless otherwise specified in the remediation plan, a lot is subject to these requirements when the boundary of a delineated area for an onsite sewage treatment and disposal system remediation plan encompasses or intersects the lot, or if the remediation plan otherwise identifies the lot as subject to its requirements. The permit application must specifically identify additional stringent requirements of an onsite sewage treatment and disposal system remediation plan and how the more stringent requirements will be met.

(c) If the onsite sewage treatment and disposal system remediation plan has provisions that exempt or otherwise allow for relief from total compliance with the remediation plan requirements, the permit applicant must provide documentation affirmatively demonstrating that the thresholds for the exemption or other relief are met.

(8) All materials incorporated herein may be obtained from the Department of Environmental Protection, Onsite Sewage Program at www.floridadep.gov or 2600 Blair Stone Road, MS #3596, Tallahassee, Florida 32399-2400.

Rulemaking Authority 381.0065(3)(a), 381.0065(4)(e), 489.553(3), 489.557(1) FS. Law Implemented 381.0065, 381.0067, 386.041, 489.553 FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.41, Amended 3-17-92, 1-3-95, 5-14-96, 2-13-97, Formerly 10D-6.041, Amended 11-19-97, 2-3-98, 3-22-00, 9-5-00, 5-24-04, 11-26-06, 6-25-09, 4-28-10, 7-16-13, Formerly 64E-6.001, Amended 6-28-23.

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62-6.002 Definitions.

For the purposes of this chapter, the following words and phrases shall have the meanings indicated:

- (1) Absorption surface – the total surface area of soil at the bottom of the drainfield.
- (2) Aerobic treatment unit – a sewage treatment unit which introduces air into sewage to provide aerobic biochemical stabilization within a treatment receptacle.
- (3) Alternative system – any approved onsite sewage treatment and disposal system used in lieu of, including modifications to, a standard subsurface system.
- (4) American National Standards Institute, hereafter referred to as ANSI – an organization comprised of trade associations, technical societies, professional groups, consumer organizations, and individual companies with headquarters located at 1430 Broadway, New York, New York 10018. This organization acts as a clearinghouse and coordinating body for voluntary standards activities in the United States, and approves as American National Standards those standards that have been developed according to its principles of openness, due process and consensus. Among its activities is accreditation of third-party certification programs.
- (5) American Society for Testing Materials hereafter referred to as ASTM – a technical society with headquarters located at 1916 Race Street, Philadelphia, Pennsylvania 19103, which develops and publishes national standards for the testing and quality assurance of construction materials.
- (6) Approved – an onsite sewage treatment and disposal system constructed and installed in compliance with the standards and requirements of this chapter and which has received final installation approval. “Approved” installation does not imply that a system will perform satisfactorily for a specific period of time.
- (7) Approved maintenance entity – any person or business entity which has been issued a written permit by the Department to provide maintenance services associated with approved onsite aerobic treatment units.
- (8) Aquifer – a geological formation, group of formations, or part of a formation that is capable of yielding potentially usable quantities of potable water from wells or springs.
- (9) Available publicly owned or investor-owned sewerage system – as defined by Section 381.0065(2), F.S.
- (10) Base flood – the flood having a one percent chance of being equaled or exceeded in any given year.
- (11) Bedroom – as defined by Section 381.0065(2), F.S.
- (12) Building Area – that enclosed habitable area of a dwelling unit, excluding the garage, carport, exterior storage shed, or open or screened patios or decks. Calculations of building area shall be made by measurements of the outside building dimensions. Building area of each additional story of the structure shall be added to determine the total building area.
- (13) Commercial Sewage Waste – Non-toxic, non-hazardous wastewater from commercial facilities. Examples of establishments included in this definition are commercial and institutional food operations, commercial laundry facilities with no more than 4 machines, and animal holding facilities.

- (14) Department – the Department of Environmental Protection including authorized agents of the individual district offices.
- (15) Domestic sewage waste – as defined by Section 381.0065(2), F.S. Domestic sewage is further categorized as:
- (a) Blackwater – as defined by Section 381.0065(2), F.S.
 - (b) Graywater – as defined by Section 381.0065(2), F.S.
 - (c) Domestic sewage waste ranges:
 - 1. Carbonaceous Biochemical Oxygen Demand (CBOD5), maximum 300 mg/l,
 - 2. Total Suspended Solids (TSS), maximum 200 mg/l,
 - 3. pH, 6 – 8; or within 1 pH unit of the water supply pH; and,
 - 4. Nitrogen (Total Kjeldahl Nitrogen, TKN) maximum 100 mg/l.
- (16) Dosing Tank – See Pump Tank.
- (17) Drainage Ditch – a trench dug for the purpose of draining water from the land or for transporting water for use on the land. Swales are excluded from this definition.
- (18) Drainfield – a system of open-jointed or perforated piping, approved alternative distribution units, or other treatment facilities designed to distribute effluent for filtration, oxidation and absorption by the soil within the zone of aeration.
- (19) Dwelling unit – a residence for the housing of a single family whether such residence is a detached structure or a unit of a multiple family building.
- (20) Effective capacity – the liquid volume of a tank contained below the liquid level line.
- (21) Effective soil depth – the depth of slightly or moderately limited soil material at an onsite sewage treatment and disposal system drainfield site.
- (22) Establishment – a multi-family housing, apartment, condominium or townhouse complex, a mobile home park or recreational vehicle park, a non-residential commercial or institutional development or places of business or assembly. An establishment includes all buildings or structures, and the land appertaining thereto and shall have an owners association or other legal entity which is responsible for maintenance and operation of the development's sewage treatment and disposal facilities.
- (23) Failure – a condition existing within an onsite sewage treatment and disposal system which prohibits the system from functioning in a sanitary manner and which results in the discharge of untreated or partially treated wastewater onto ground surface, into surface water, into ground water, or which results in the failure of building plumbing to discharge properly.
- (24) Filled System – a drainfield system where a portion, but not all, of the drainfield sidewalls are located at an elevation above the elevations of undisturbed native soil on the site.
- (25) Flooding – a covering of soil surface by water from any source, such as streams overflowing their banks, runoff from adjacent or surrounding slopes, elevation of the ground water table exceeding that of the soil surface, or combinations of these. Terms also associated with flooding and used elsewhere in this chapter are:
- (a) Frequent – flooding which occurs more than once every two years on the average;
 - (b) Ten year flood elevation – that flood elevation which has a 10 in 100 probability of being equaled or exceeded in any calendar year.
- (26) Florida Keys – as defined by Section 381.0065(2), F.S.
- (27) Food Establishment Sludge – oils, fats, greases, food scraps and other grease interceptor contents generated by a food operation or institutional food preparation facility using an onsite sewage treatment and disposal system.
- (28) Impermeable – when used in reference to Section 381.0065(2), F.S., shall mean a condition where the maximum hydraulic conductivity is less than or equal to 1×10^{-7} centimeters per second.
- (29) Industrial, hazardous or toxic sewage waste – wastewater not otherwise defined as domestic sewage waste or commercial sewage waste. Wastewater carried off by floor drains, utility sinks and equipment drains located in buildings in industrial or manufacturing areas, estimated volumes of commercial sewage wastes exceeding 5,000 gallons per day, wastewater from commercial laundry facilities with more than 4 self-service machines, and wastewater from car and truck washes are included in this definition.
- (30) Innovative system – as defined by Section 381.0065(2), F.S.
- (31) Limitation ratings – Soil classification ratings which describe the relative suitability of soils to properly assimilate sewage effluent. The three rating categories for the purpose of this rule are:
- (a) Slightly limited – soil materials with favorable properties for the use of a drainfield.
 - (b) Moderately limited – soil materials that have properties moderately favorable for the use of a drainfield.

- (c) Severely limited – soil materials which have one or more properties unsuitable for the use of a drainfield.
- (32) Lot – as defined by Section 381.0065(2), F.S.
- (33) Mean annual flood line – as defined by Section 381.0065(2), F.S.
- (34) Mean annual flood line indicators– as used in Section 381.0065(2), F.S. means:
- (a) Water stains – shall mean the same as the hydrologic indicator used in the Florida Wetlands Delineation Manual, under the definition of “Water marks”;
- (b) Hydric adventitious roots – shall mean the same as the hydrologic indicator used in the Florida Wetlands Delineation Manual, under the definition of “Morphological plant adaptations”;
- (c) Drift lines – shall mean the same as the hydrologic indicator used in the Florida Wetlands Delineation Manual, under the definition of “Drift lines and rafted debris”;
- (d) Rafted debris – shall mean the same as the hydrologic indicator used in the Florida Wetlands Delineation Manual, under the definition of “Drift lines and rafted debris”;
- (e) Aquatic mosses and liverworts – shall mean the same as the hydrologic indicator used in the Florida Wetlands Delineation Manual, under the definition of “Aquatic mosses and liverworts”;
- (f) Moss collars – a proliferation of terrestrial mosses and liverworts that mark the upper limits of the mean annual flood line;
- (g) Lichen lines – shall mean the same as the hydrologic indicator used in the Florida Wetlands Delineation Manual, under the definition of “Elevated lichen lines.”
- (35) Mean high water – the average height of tidal high waters over a 19-year period.
- (36) Mean high water line – the intersection of the tidal plane of mean high water with the shore.
- (37) Mound system – a drainfield constructed at a prescribed elevation in a prepared area of fill material. All drainfields where any part of the bottom surface of the drainfield is located at or above the elevation of undisturbed native soil in the drainfield area is a mound system.
- (38) National Sanitation Foundation International, hereafter referred to as NSF – a not for profit research, education and service organization located at 3475 Plymouth Road, Ann Arbor, Michigan 48106, that develops standards and criteria for equipment, products and services that bear upon health.
- (39) Non-potable water well – a well intended exclusively for irrigation purposes, or for supplying water to a heat pump system or a well for receiving discharge water from a heat pump system.
- (40) “O” Horizon – the layer of organic matter on the surface of a mineral soil. This soil layer consists of decaying plant residues.
- (41) Obstructed land – those areas on a lot or property used for such purposes as pools, concrete slabs, buildings, driveways, parking and similar areas which prohibit, hinder, or affect the installation, operation or maintenance of an onsite sewage treatment and disposal system.
- (42) Onsite sewage treatment and disposal system, also referred to as system – as defined by Section 381.0065(2), F.S. Appurtenances installed within the building sewer prior to a treatment receptacle shall not be included in this definition. Systems covered by Chapter 403, F.S., are not included in this definition.
- (43) Potable water line – as defined by Section 381.0065(2), F.S.
- (44) Potable water well – a source of water used for drinking, culinary or domestic purposes. The following classifications of potable wells are used in this chapter.
- (a) Private potable well – a well used only by one or two residences, one of which may be a rental residence.
- (b) Public drinking water well – a well serving any drinking water system other than a private water system. Public systems are classified in the following manner:
1. Community public water system – as defined in Section 403.852, F.S., such water system serves a year-round residential population of at least 25 people per day or has a minimum of 15 year-round residential service connections.
 2. Non-community public water system – as defined in Section 403.852, F.S., such water system serves a transient population of at least 25 people per day at least 60 days per year or has a minimum of 15 non-residential service connections.
 3. Non-transient non-community public water system – as defined in Section 403.852, F.S., such water system is not a community water system, but is a system that regularly serves at least 25 of the same people for over 6 months of the year.
 4. Limited use public water system – a public water system not regulated by the Florida Safe Drinking Water Act or Chapter 62-550, 62-555, or 62-560 of the F.A.C., and further specified as limited use commercial public water system which provides piped

potable water to one or more non-residential establishments and limited use community public water system which provides piped potable water to five or more private residences or two or more rental residences.

(c) Multi-family water well – a well that is used by three or four residences, one of which may be a rental residence.

(45) Pump tank – a tank, or dedicated section of a multi-compartment tank used to locate a pump that is used to distribute effluent to a drainfield, or other part of an onsite sewage treatment and disposal system.

(46) Regulatory floodway – means the channel of a river or other water course and adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

(47) Repair – replacement of or modifications or additions to a failing system which are necessary to allow the system to function in accordance with its design or must be made to eliminate a public health or pollution hazard. Servicing or replacing with like kind mechanical or electrical parts of an approved onsite sewage treatment and disposal system; or making minor structural corrections to a tank, or distribution box, does not constitute a repair. The use of any treatment method that is intended to improve the functioning of any part of the system, or to prolong or sustain the length of time the system functions, shall be considered a repair. The use of any non-prohibited additive by the system owner, through the building plumbing, shall not be considered a repair. Removal of the contents of any tank or the installation of an approved outlet filter device, where the drainfield is not disturbed, shall not be considered a repair. Replacement of a broken lid to any tank shall not be considered a repair. Splicing a drip emitter line where no emitter is eliminated shall not be considered a repair.

(48) Septage – as defined by Section 381.0065(2), F.S. Excluded from this definition are the contents of portable toilets, holding tanks, and grease interceptors.

(49) Septic tank – a watertight receptacle constructed to promote separation of solid and liquid components of wastewater, to provide limited digestion of organic matter, to store solids, and to allow clarified liquid to discharge for further treatment and disposal into a drainfield.

(50) Spoil material – any part of the existing drainfield, any adjacent soil material within 24 inches vertically and 12 inches horizontally of the drainfield, and any soil that has visible signs of effluent that has been removed as part of a repair, modification or abandonment of an onsite sewage treatment and disposal system.

(51) Standard subsurface drainfield system – an onsite sewage treatment and disposal system drainfield consisting of a distribution box or header pipe and a drain trench or absorption bed with all portions of the drainfield sidewalls installed below the elevation of undisturbed native soil.

(52) Subdivision – as defined by Section 381.0065(2), F.S.

(53) Surface water bodies – are classified as:

(a) Permanent nontidal surface water body – as defined by Section 381.0065(2), F.S.

(b) Tidally influenced surface water body-as defined by Section 381.0065(2), F.S.

(54) Swale – a manmade, vegetatively-stabilized trench which contains contiguous areas of standing or flowing water for less than 72 hours following a rainfall event. A swale has a top width-to-depth ratio of the cross-section equal to or greater than 6:1, or side slopes equal to or greater than 3 feet horizontal to 1 foot vertical.

(55) Temporary – a single period or an accumulation of periods not exceeding 120 total days in any 365-day period.

(56) Toxic or hazardous chemical – as defined by Section 381.0065(2), F.S.

(57) Undisturbed native soil – soil which has been deposited onto a site by the actions of nature and which has not been disturbed or altered by the activities of man.

(58) Water table elevation – the upper surface of the groundwater or that level below which the soil or underlying rock material is wholly saturated with water. Water table elevation is measured from the soil surface downward to the upper level of saturated soil or up to the free water level.

(59) Wettest season – that period of time each year in which the ground water table elevation can normally be expected to be at its highest elevation.

Rulemaking Authority 381.0065(3)(a) FS. Law Implemented 381.0065 FS. History–New 12-22-82, Amended 2-5-85, Formerly 10D-6.42, Amended 3-17-92, 1-3-95, Formerly 10D-6.042, Amended 11-19-97, 3-22-00, 11-26-06, 7-16-13, Formerly 64E-6.002.

62-6.003 Permits.

(1) System Construction Permit – No portion of an onsite sewage treatment and disposal system shall be installed, repaired, altered, modified, abandoned or replaced until a construction permit has been issued on Form DEP 4016, 08/09, Construction

Permit, herein incorporated by reference. If building construction has commenced, the system construction permit shall be valid for an additional 90 days beyond the eighteen month expiration date. A fee shall not be charged for a repair permit issued within 12 months from the date of final authorization of the onsite sewage treatment and disposal system. If a construction or repair permit for an onsite sewage treatment and disposal system is transferred to another person the date of the construction or repair permit shall not be amended, but shall run from the date of original issuance prior to the transfer. Servicing or replacing with like kind mechanical or electrical parts of an approved onsite sewage treatment and disposal system; pumping of septage from a system; or making minor structural corrections to a tank, or distribution box, does not constitute a repair.

(2) System Inspection – Before covering with earth and before placing a system into service, a person installing or constructing any portion of an onsite sewage treatment and disposal system shall notify the Department of the completion of the construction activities and shall have the system inspected by the Department for compliance with the requirements of this chapter, except as noted in subsection 62-6.003(3), F.A.C., for repair installations.

(a) If the system construction is approved after an inspection by the Department, the Department shall issue a “Construction Approval” notice to the installer.

(b) If the system installation does not pass the construction inspection on any type of system installation, the installer shall make all required corrections and notify the Department of the completion of the work prior to reinspection of the system. A reinspection fee shall be charged to the installer for each additional inspection leading up to construction approval.

(c) Final installation approval shall not be granted until the Department has confirmed that all requirements of this chapter, including building construction and lot grading are in compliance with plans and specifications submitted with the permit application.

1. In addition, if the system was designed by an engineer, who shall be licensed in the State of Florida, the Department shall require the design engineer or the design engineer’s designee, who shall be a licensed engineer, to certify that the installed system complies with the approved design and installation requirements. Single family residences are excluded from this requirement, however, all changes to the engineering specifications shall be approved by the design engineer.

2. If additional site visits after the construction approval inspection are necessary to establish the compliance of the building construction and lot grading, or to establish the compliance with any provision of this chapter, a reinspection fee shall be charged to the permit applicant for each inspection of the building and site leading to the final installation approval.

3. If an operating permit is required for the onsite sewage treatment and disposal system, final installation approval shall not be granted until the operating permit application and fee have been received by the Department.

(d) Where an establishment is serviced by an onsite sewage treatment and disposal system, Section 381.0065(4), F.S., shall govern when occupancy of a building can be allowed. “Approved” installation does not imply that a system will perform satisfactorily for a specific period of time.

(e) Systems which are required to have an annual or biennial operating permit and the structures which they serve shall be inspected by the Department at least once per year during the term of the permit to determine compliance with the terms of the operating permit.

(3) Repair Inspections – A system repair shall be inspected by the Department or a master septic tank contractor to determine compliance with construction permit standards prior to final covering of the system. Inspections shall comply with subsection 62-6.003(2), F.A.C., and the following:

(a) A master septic tank contractor may, at their option, cover a system repair when the following conditions are met:

1. The master septic tank contractor has requested an inspection from the Department during the normal duty day before the date and time the repair will be ready for inspection. Inspections must be scheduled during normal inspection hours and in conjunction with the inspection schedule of the Department.

2. At the date and time specified for inspection, the Department is not on site to conduct an inspection within 30 minutes of the scheduled time. If the Department is on site to conduct the inspection and the system is not ready for inspection within 30 minutes after the scheduled time, a reinspection shall be requested. A reinspection fee shall be charged. Contractors shall cancel or reschedule inspections not later than two hours prior to the scheduled time. In such cases, no reinspection fee shall be charged.

3. The master septic tank contractor is physically on site and conducts the inspection.

(b) The master septic tank contractor shall document the inspection of Form DEP 4016, and fax or hand deliver the form to the Department by the next normal duty day following the inspection.

(c) A master septic tank contractor shall not cover a system repair when the Department has performed an inspection and has

notified the contractor of violations. Any system that has been inspected by the Department and found to be in violation of construction standards of this rule, must receive a reinspection from the Department before the system may be covered. A reinspection fee shall be charged for each reinspection leading to final approval.

(d) The Department shall issue a “final approval” of the system repair based on the master septic tank contractor’s inspection.

(e) Nothing herein prevents the Department from inspecting a system inspected by a master septic tank contractor. No inspection is final until approved by the Department.

(4) Voiding a permit – After an onsite sewage treatment and disposal system has received final installation approval from the Department, if the building is modified in such a way that a larger system would be required, if any portion of the required drainfield unobstructed area is covered by impervious material, if the property is subdivided into a smaller lot or lots whereby the permitted system would not have been originally approved, if a well is installed on the property which violates the setbacks to the approved system, or if the system is improperly modified or damaged, the Department shall undertake administrative action to revoke the permit. The Department shall prohibit the further or continued use of a system when the permit has become void by injunction or other procedure authorized by law.

(5) Operating permits – No business or facility shall occupy a building served by an onsite sewage treatment and disposal system if the building is located in an area zoned or used for industrial or manufacturing purposes or its equivalent; or where a business will generate commercial sewage waste; and no structure shall be occupied where an aerobic treatment unit or performance-based treatment system is used, until an “Application for Onsite Sewage Treatment and Disposal System Operating Permit” has been received and approved by the Department. Form DEP 4081, 10/96 “Application for Onsite Sewage Treatment and Disposal System Operating Permit,” is herein incorporated by reference.

(a) Property owners or their authorized agents are required to obtain an annual operating permit for systems located in an area zoned or used for industrial or manufacturing purposes or its equivalent or where a business will generate commercial sewage waste. The permit shall designate the person or entity responsible for the operation and maintenance of the system; the type of activity proposed on the site; persons or businesses which will use the system; equipment and types and quantities of chemical compounds which will be used by the building occupants which are likely to be discharged into the onsite sewage treatment and disposal system. At a minimum, the owner or person responsible for maintenance of the system shall test, or cause to be tested, the onsite sewage treatment and disposal system effluent in a qualitative and quantitative manner for any chemical compounds associated with the particular industrial or manufacturing operations conducted in that establishment, as directed by the Department. The frequency of testing shall be specified on the annual operating permit.

(b) Operating permits are not transferable. If the owner of the system remains the same but the tenancy of the building changes, a Business Survey, Form DEP 4081A, 10/96, herein incorporated by reference, must be completed and submitted to the Department for review. Changes in building occupancy shall be reviewed per Section 381.0065(4), F.S.

(c) Maintenance entities contracting to service aerobic treatment systems and performance-based treatment systems shall obtain a biennial operating permit from the Department for the system. Persons operating an aerobic treatment unit or performance-based treatment system shall permit Department personnel right of entry to the property during normal working hours to allow for effluent sampling or evaluating the general state of repair or function of the system. Persons required to obtain an annual operating permit for an onsite sewage treatment and disposal system in an industrial or manufacturing zone or its equivalent, or where the system receives commercial sewage, shall not be required to obtain another operating permit for an aerobic treatment unit or performance-based treatment system at that site. Performance-based treatment systems that also include an aerobic treatment unit require only one biennial operating permit for the system.

(6) Expired Permits – Any new construction, repair, or modification permit issued by the Department, that has received construction approval within the previous five years but has not received final approval may be approved provided all of the following conditions are met:

(a) The applicant or agent provides a written statement that there have been no changes in application or site conditions from the original permit. The statement must specifically address any changes on adjacent lots.

(b) A site re-evaluation confirms that site conditions have not changed sufficiently to place the system in violation of the rules under which it was permitted and received construction approval.

(c) Fees for a new construction permit and the research/training surcharge are paid. A site re-evaluation fee is paid, if applicable. A new permit shall be issued under the rules under which the original permit was issued.

(d) A final system inspection is performed showing compliance with all rules under which the construction approval was

granted. If applicable, a system re-inspection fee is paid.

(7) All materials incorporated herein may be obtained from the Department of Environmental Protection, Onsite Sewage Program at www.floridadep.gov or 2600 Blair Stone Road, MS #3596, Tallahassee, Florida 32399-2400.

Rulemaking Authority 381.0065(3)(a), 489.553(3), 489.557(1) FS. Law Implemented 381.0065, 381.0067, 386.041 FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.43, Amended 3-17-92, 1-3-95, 5-14-96, 2-13-97, Formerly 10D-6.043, Amended 3-22-00, 4-21-02, 5-24-04, 11-26-06, 6-25-09, 4-1-10, 4-28-10, 7-16-13, Formerly 64E-6.003.

62-6.004 Application for System Construction Permit.

(1) No person must cause or allow construction of a system without first applying for and obtaining a construction permit. Form DEP 4015, effective date 06-21-2022, Application for Construction Permit, herein adopted and incorporated by reference at <https://www.flrules.org/Gateway/reference.asp?No=Ref-14359> must be used for recording permit application information. Copies of this document are available as provided in subsection (9) below.

(2) An application shall be completed in full, signed by the owner or the owner's authorized representative, or a contractor licensed in accordance with Chapter 489, F.S., and shall be accompanied by all required exhibits and fees. If the owner of a property uses an authorized representative to obtain a new system construction permit, a signed statement from the owner of the property assigning authority for the representative to act on the owner's behalf shall accompany the application. This statement shall include specific information allowing the representative to act on the owner's behalf in all aspects of an application for an onsite sewage treatment and disposal system.

(3) The suitability of a lot, property, subdivision or building for the use of an onsite sewage treatment and disposal system must be determined from an evaluation of lot size, anticipated sewage flow into the proposed system, the anticipated sewage waste strength, soil and water table conditions, soil drainage and site topography and other related criteria. Necessary site investigations and tests must be performed at the expense of the owner by either an engineer with soils training who is licensed in the State of Florida pursuant to Chapter 471, F.S., by Department personnel, registered septic tank contractors, master septic tank contractors, professional soil scientists certified and registered by the Florida Association of Environmental Soil Scientists, and persons certified under Section 381.0101, F.S. Registered septic tank contractors must perform site evaluations for system repairs only. When determining that the necessary site investigations and tests be performed by an engineer licensed in the State of Florida, the Department must consider the criteria listed in subsection 62-6.004(4), F.A.C. Results of site investigations must be entered on, or attached to, the construction permit application form for consideration by the Department. Site evaluations must occur not earlier than 180 days prior to the date the Department receives the permit application. Site evaluations remain valid for the life of the permit. The application must also include the following data:

(a) A plan or plat of the lot or total site ownership. The site plan shall be drawn to scale and shall be for the property where the system is to be installed.

1. The site plan shall show boundaries with dimensions and any of the following features that exist or that are proposed:

- a. Structures,
- b. Swimming pools,
- c. Recorded easements,
- d. Onsite sewage treatment and disposal system components,
- e. Slope of the property,
- f. Wells,
- g. Potable and non-potable water lines and valves,
- h. Drainage features,
- i. Filled areas,
- j. Excavated areas for onsite sewage systems,
- k. Obstructed areas,
- l. Surface water bodies; and,
- m. Location of the reference point for system elevation.

2. If the Department is responsible for performing the site evaluation, the applicant or applicant's authorized representative shall indicate the approximate location of wells, onsite sewage treatment and disposal systems, surface water bodies and other pertinent facilities or features on contiguous or adjacent property. If the features are within 75 feet of the applicant lot, the estimated distance

to the feature must be shown but need not be drawn to scale.

3. If the Department will not be performing the site evaluation, the applicant or authorized agent shall be responsible for the measurements to all features, including the pertinent features within 75 feet of the applicant lot. The location of any public drinking water well, as defined in paragraph 62-6.002(44)(b), F.A.C., within 200 feet of the applicant's lot shall also be shown, with the distance indicated from the system to the well.

4. If an individual lot is five acres or greater, the applicant may draw a minimum one acre parcel to scale showing all required features, or the minimum size drawing necessary to properly exhibit all required features, whichever is larger. The applicant must also show the location of that one acre or larger parcel inside the total site ownership.

5. All information that is necessary to determine the total sewage flow and proper setbacks on the site ownership shall be submitted with the application. The applicant lot shall be clearly identified. A copy of the legal description or survey must accompany the application for confirmation of property dimensions only.

(b) For residences, a floor plan drawn to scale or showing the total building area of the structure, at the applicants' option, and showing the number of bedrooms and the building area of each dwelling unit. Non-residential establishments shall submit a floor plan drawn to scale showing the square footage of the establishment, all plumbing drains and fixture types, and any other features necessary to determine the composition and quantity of wastewater to be generated. Plumbing fixtures located at a non-residential establishment shall be included on the floor plan, but need not be drawn to scale.

(c) At least two soil profile descriptions within the proposed system soil absorption area to a minimum depth of 6 feet or to refusal, for which the minimum information provided is the upper and lower horizon boundaries, Munsell color of the horizon and its components and USDA soil texture; using USDA Soil Classification methodology as described in Chapter 3 of the Soil Survey Manual, United States Department of Agriculture, Handbook No. 18, Issued March 2017, herein adopted and incorporated by reference at <http://www.flrules.org/Gateway/reference.asp?No=Ref-14360>. Copies of this document are available as provided in subsection (9) below. At a minimum, a soil profile must be provided at the beginning and end of the proposed drainfield site. Where the replacement of severely limited soil is proposed, soil profiles must be performed to a minimum depth of 6' feet or to the depth of the slightly or moderately limited soil layer lying below the replaced layer, whichever is greater. The evaluator must document the locations of all soil profiles on the site plan.

(d) Water table elevations which exist at the time of the site evaluation and estimated water table elevation during the wettest season of the year. Water table elevations shall be established from a benchmark or other fixed point of reference located on the property or within reasonable proximity to it. The existing property elevation at the site of each soil profile must also be recorded relative to the benchmark or fixed point of reference.

(e) Subdivisions platted and recorded or unrecorded prior to January 1, 1972, will be considered on the basis of an evaluation of soil characteristics, water table elevations, history of flooding and records of service of existing installations in the same general area.

(f) A Coastal Construction Control Line Permit or an exemption notice from the Department if any component of the onsite sewage treatment and disposal system or the shoulders or slopes of the system mound will be seaward of the Coastal Construction Control Line, established under Section 161.053, F.S. Should the location of the proposed onsite system relative to the control line not be able to be definitively determined based on the site plan and the online products available on the DEP website, the applicant shall provide a survey prepared by a certified professional surveyor and mapper showing the location of the control line on the subject property.

(4) All plans and forms submitted by a licensed engineer shall be dated, signed and sealed. Except as provided for in subsection 62-6.003(2), F.A.C., the Department shall require the design engineer to certify that the installed system complies with the approved design and installation requirements. Under the following circumstances, the Department shall require for review and approval, the submission of detailed system construction plans prepared by an engineer who is licensed in the State of Florida:

(a) Systems serving establishments with proposed domestic sewage flow rates of 2,500 or more gallons per day.

(b) Systems serving establishments with proposed commercial sewage flow rates of 1,000 or more gallons per day.

(c) Systems where the total required drainfield area is 1,500 square feet or greater.

(d) The applicant proposes to split the flow from any residence or establishment in a method other than that provided for by rule.

(e) The repair or modification of an engineer-designed system that meets these criteria for requiring an engineered design and that alters the original engineered design.

- (f) All performance-based treatment systems.
- (g) All innovative systems.
- (h) All sites where the seasonal high water table has or will be altered by physical or mechanical means.
- (i) All sites requiring engineer designs as a condition of a variance or waiver approval.
- (j) All drip irrigation systems.

(5) The applicant shall be the permit holder and shall be held responsible for all information supplied to the Department. The signed application, site evaluation, and system design plans when required, serve as the basis by which the Department determines the issuance of a construction permit. In the event of a change in any information given in the application which served as basis for issuing a construction permit, the permit holder will immediately file an amended application detailing such changed conditions. If the new conditions are determined to be in compliance with the standards in this chapter, the construction permit shall be amended. If the new conditions are determined to be in non-compliance with the standards of this chapter, the permit shall be revoked subject to the provisions of Chapter 120, F.S. A system construction permit application shall be valid for one year. If a permit has not been issued to the applicant within one year from the date of application, then the Department shall review the construction permit application for accuracy at no charge prior to issuance of a permit. The applicant shall supply a statement that the information contained in the application has not changed, or shall amend the application. If a site visit is necessary as part of the review, then a re-evaluation fee shall be charged. If the rules under which the application was accepted have changed, and an onsite sewage treatment and disposal system construction permit has not been issued, a new permit application shall be required.

(6) Requests for variance must be made on Form DEP 4057, effective date 06-21-2022, Application for Variance from Rule 62-6.004, F.A.C., herein adopted and incorporated by reference at <https://www.flrules.org/Gateway/reference.asp?No=Ref-14361>. Copies of this document are available as provided in subsection (9) below.

(7) Where a property owner proposes to build or has built multiple residences or multiple businesses on a single lot, and the entire area of the lot is required to accommodate the designed sewage flow from the multiple residences or multiple businesses to the onsite sewage treatment and disposal system, the property owner must submit, prior to issuance of a construction permit, a written utility easement which has been executed and recorded in the public property records at the county courthouse. The utility easement must bind the property together so that the original lot size is retained for purposes of compliance with all the requirements of Chapter 62-6, F.A.C., and must include provisions for maintaining the onsite sewage treatment and disposal system. For example, a duplex built on a single lot with a single onsite sewage treatment and disposal system serving both halves of the duplex must have a written utility easement executed and recorded in the public property records before an onsite sewage treatment and disposal system construction permit is issued. In order to obtain a repair permit, the property owner must submit a copy of the recorded utility easement demonstrating the retention of the original lot size for purposes of the onsite sewage treatment and disposal system and a method for maintaining the system. For example, each half of a duplex built on a single lot with a single onsite sewage treatment and disposal system serving both halves of the duplex is sold to separate persons. If, when the onsite sewage treatment disposal system fails, and a written utility easement was not executed and recorded in the public property records before the sales, it must be done before an onsite sewage treatment and disposal system repair permit is issued.

(a) Where a property owner proposes to build or has built a single residence or a single business or multiple residences or businesses on multiple lots, and the residence's or business's authorized sewage flow requires the use of multiple lots, or parts thereof, for the onsite sewage treatment and disposal system, the property owner must submit, prior to issuance of a permit, a written utility easement executed and recorded in the public property records at the county courthouse. The utility easement must bind the required property together so that the original lots and their collective size, or part thereof, is retained for purposes of the onsite sewage treatment and disposal system, and must include provisions for maintaining the onsite sewage treatment and disposal system. For example, a residence or business built on three lots with a sewage flow which is large enough to require the land from all three lots must have a written utility easement executed and recorded in the public property records before an onsite sewage treatment and disposal system construction permit may be issued. In order to obtain a repair permit, the property owner must submit a copy of the recorded utility easement demonstrating the retention of the original lots and their collective size for purposes of the onsite sewage treatment and disposal system and a method for maintaining the system.

(b) Where a property owner, through inadvertent error or mistake, has built multiple residences or multiple businesses on a series of lots and each residence or business has its own onsite sewage treatment and disposal system or the sewage flow from the residence or business exceeds the allowable limits established for the area of land upon which the residence or business is located, the property owner must execute and record in the public property records, a written utility easement, for the remaining undeveloped lots in the subdivision, which informs the public of the amount of sewage flow which will be generated or the number of onsite

sewage treatment and disposal systems which will be installed in that subdivision. It must also state that when the maximum amount of sewage flow or maximum number of onsite sewage treatment and disposal systems has been reached for the subdivision, no further development can occur until sewer is available.

(8) Innovative Systems approval for onsite sewage treatment and disposal systems must be initiated by submittal to the Department of an application for permit using Form DEP 3143, effective date 06-21-2022, Innovative Onsite Sewage Treatment and Disposal System Permit Application, hereby adopted and incorporated by reference at <https://www.flrules.org/Gateway/reference.asp?No=Ref-14362>. After an innovative system permit has been issued, the Department is authorized to issue individual system construction permits that conform to the innovative system permit. Form DEP 3144, effective date 06-21-2022, Owner acknowledgment Form, herein adopted and incorporated by reference and Form DEP 3145, effective date 06-21-2022, Innovative Onsite Sewage Treatment and Disposal System Review Form herein adopted and incorporated by reference at <https://www.flrules.org/Gateway/reference.asp?No=Ref-14395>, must be used to record information that describes notification requirements between the permit applicant, and the Department. Copies of these documents are available as provided in subsection (9) below.

(9) All materials incorporated herein may be obtained from the Department of Environmental Protection, Onsite Sewage Program at www.floridadep.gov or 2600 Blair Stone Road, MS #3596, Tallahassee, Florida 32399-2400.

Rulemaking Authority 381.0065(3)(a), 381.0065(4)(e), 489.553(3) FS. Law Implemented 381.0065, 489.553 FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.44, Amended 3-17-92, 1-3-95, 5-14-96, 2-13-97, Formerly 10D-6.044, Amended 11-19-97, 3-22-00, 11-26-06, 6-25-09, 4-28-10, Formerly 64E-6.004, Amended 6-21-22.

62-6.005 Location and Installation.

All systems must be located and installed so that with proper maintenance the systems function in a sanitary manner, do not create sanitary nuisances or health hazards and do not endanger the safety of any domestic water supply, groundwater or surface water. Sewage waste and effluent from onsite sewage treatment and disposal systems must not be discharged onto the ground surface or directly or indirectly discharged into ditches, drainage structures, ground waters, surface waters, or aquifers. To prevent such discharge or health hazards:

(1) Systems established after the effective date of the rule must be placed no closer than the minimum distances indicated for the following:

(a) Seventy-five feet from a private potable well as defined in paragraph 62-6.002(44)(a), F.A.C., or a multi-family water well as defined in paragraph 62-6.002(44)(c), F.A.C.

(b) One-hundred feet from a public drinking water well as defined in paragraph 62-6.002(44)(b), F.A.C., if such a well serves a facility with an estimated sewage flow of 2,000 gallons or less per day.

(c) Two-hundred feet from a public drinking water well as defined in paragraph 62-6.002(44)(b), F.A.C., if such a well serves a facility with an estimated sewage flow of more than 2,000 gallons per day.

(d) Fifty feet from a non-potable water well as defined in subsection 62-6.002(39), F.A.C.

(e) Ten feet from any storm sewer pipe, to the maximum extent possible, but in no instance shall the setback be less than 5' feet.

(f) Fifteen 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 or the design high-water level of normally dry drainage ditches or normally dry individual-lot stormwater retention areas.

(2) Systems must not be located under buildings or within 5' feet of building foundations, including pilings for elevated structures, or within 5' feet of mobile home walls, swimming pool walls, or within 5' feet of property lines except where property lines abut utility easements which 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.

(a) Sidewalks, decks and patios are not subject to the 5' foot setback, however, drainfields must not be installed beneath such structures. Any tank located beneath a driveway must have traffic lids as specified in paragraph 62-6.013(1)(f), F.A.C. Concrete structures which are intended to be placed over a septic tank must have a barrier of soil or plastic material placed between the structure and the tank so as to preclude adhesion of the structure to the tank.

(b) Systems must not be located within 10' feet of 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 or the water lines themselves consist of schedule 40 PCV or stronger. The water line must not be

located within 24" inches of the onsite sewage treatment and disposal system. Potable water lines within 5' feet of the drainfield must not be located at an elevation lower than the drainfield absorption surface. Non-potable water lines must not be located within 24" inches of the system without backflow devices per Section 381.0065(2), F.S., being installed on the water line to preclude contamination of the water system.

(c) Systems must be setback a minimum of 15' feet from groundwater interceptor drains.

(3) Except for the provisions of Sections 381.0065(4)(g)1. and 2., F.S., systems must not be located laterally within 75' feet of the boundaries of surface water bodies. Systems must be located a minimum of 15' feet from the design high water line of a swale, retention or detention area designed to contain standing or flowing water for less than 72 hours after a rainfall, or the design high water level of normally dry drainage ditches or normally dry individual lot storm water retention areas.

(4) Suitable, unobstructed land must be available for the installation and proper functioning of the system. The minimum unobstructed area must:

(a) Be at least 1.5 times as large as the drainfield absorption area required by rule. For example, if a 200' square feet drainfield is required, the total unobstructed area required, inclusive of the 200' square feet drainfield area, would be 300' square feet. Unobstructed soil area between drain trenches is included in the unobstructed area calculation.

(b) Be contiguous to the drainfield.

(c) Be in addition to the setbacks required in subsections (1), (2), and (3) above.

(5) Onsite sewage treatment and disposal systems if installed in fill material, the fill must be required to settle for a period of at least 6 months, or has been compacted to a density comparable to the surrounding natural soil. The fill material must be of a suitable, slightly limited soil material.

(6) To prevent soil smear and excessive soil compaction, drainfields must not be installed in soils with textures finer than sand, loamy sand, or sandy loam when the soil moisture content is above the point at which the soil changes from semi-solid to plastic.

(7) Onsite sewage treatment and disposal systems must be installed where a sewerage system is not available and when conditions in Sections 381.0065(4)(a)-(g), F.S., are met. Onsite graywater tank and drainfield systems may, at the homeowners' discretion, be utilized provided blackwater is disposed into a sanitary sewerage system when such sewerage system is available. Graywater systems may, at the homeowners' discretion, be utilized in conjunction with an onsite blackwater system where a sewerage system is not available for blackwater disposal.

(a) The lot area under Section 381.0065(4)(a), F.S., must consist of at least 1/2 acre (21,780' square feet). Contiguous area outside of the lot must not be included.

(b) The determination of lot densities under Section 381.0065(4)(b), F.S., must be made on the basis of the net acreage of the subdivision which must exclude from the gross acreage all paved areas and prepared road beds within public or private rights-of-way or easements and must also exclude surface water bodies.

(c) Maximum daily sewage flow allowances specified in Sections 381.0065(4)(a), (b) and (g), F.S., must be calculated on an individual lot by lot basis based on its net usable area in acres. The net usable area of each lot or parcel of land does not include paved areas and prepared road beds within public rights-of-way or easements and does not include surface water bodies. Contiguous unpaved and non-compacted road rights-of-way and easements with no subsurface obstructions that would affect the operation of drainfield systems may be included in determining the net usable area. Where an unobstructed easement is contiguous to two or more lots, each lot will receive its pro rata share of the area contained in the easement. The maximum daily sewage flow allowed equals the net usable area multiplied by 2,500 gallons per acre per day if a public drinking water well serving a public system as defined in subparagraph 62-6.002(44)(b)1., 2., or 3., F.A.C., is utilized, or multiplied by 1,500 gallons per acre per day if a public drinking water well serving a public water system as defined in subparagraph 62-6.002(44)(b)4., F.A.C., or a private potable well or cistern is utilized. Subsection 62-6.008(1), F.A.C., must be used for determining estimated daily sewage flows.

(d) Platted residential lots are subject to the requirements set forth in Sections 381.0065(4)(g)1. and 2., F.S.

(e) When portions of a lot or lots which were platted prior to January 1, 1972 are combined in such a manner that will decrease the total density of the subdivision, pre-1972 lot provisions apply. However, the maximum setback possible to surface water bodies must be maintained with a minimum setback of 50' feet.

(8) Notwithstanding the requirements of this section, where an effluent transmission line consists of schedule 40 PVC, the transmission line must be set back from private potable wells, irrigation wells or surface water bodies by not less than 25' feet when installed. Effluent transmission lines constructed of schedule 40 PVC must be set back from property lines and building foundations by not less than 2' feet. Schedule 40 PVC effluent transmission lines must be set back from potable water lines and storm water lines

by no less than 5' feet unless all portions of the potable water line or storm water line within 5 feet of the effluent transmission line are:

- (a) A minimum of 12" inches above the top of the effluent transmission line; and,
- (b) Sealed with a waterproof sealant within a sleeve of schedule 40 PVC or stronger pipe or the water line itself consists of schedule 40 PVC or stronger pipe.
- (9) Onsite sewage treatment and disposal systems for estimated establishment domestic sewage flows exceeding 5,000 gallons per day but not exceeding 10,000 gallons per day must be located and installed under the following conditions.
 - (a) The estimated daily sewage flow from the establishment will be divided by the net usable area associated with the establishment. The resulting number must not exceed 2,500 gallons per acre per day for establishments which use a water supply as defined in subparagraphs 62-6.002(44)(b)1., 2. and 3, F.A.C.
 - (b) No more than 5,000 gallons of wastewater will be discharged into any single onsite sewage treatment and disposal system serving the establishment.

Rulemaking Authority 381.0065(3)(a), 381.0065(4)(e), 489.553, 489.557(1) FS. Law Implemented 381.0065, 489.553 FS. History--New 12-22-82, Amended 2-5-85, Formerly 10D-6.46, Amended 3-17-92, 1-3-95, Formerly 10D-6.046, Amended 11-19-97, 2-3-98, 3-22-00, 5-24-04, 6-25-09, Formerly 64E-6.005, Amended 6-21-22.

62-6.006 Site Evaluation Criteria.

Onsite sewage treatment and disposal systems may be utilized where lot sizes are in compliance with requirements of subsection 62-6.005(7), F.A.C., and all of the following criteria are met:

(1) The effective soil depth throughout the drainfield installation site extends 42" inches or more below the bottom surface of the drainfield. Paragraphs (a), (b) and (c), list soil texture classes with their respective limitation ratings.

(a) Coarse sand not associated with an estimated wet season high water table within 48" inches below the absorption surface, sand, fine sand, loamy coarse sand, coarse sandy loam, loamy sand, and sandy loam are considered to be slightly limited soil materials.

(b) Very fine sand, loamy fine sand, loamy very fine sand, silt loam, silt, loam, fine sandy loam, very fine sandy loam, sandy clay loam, clay loam, silty clay loam, sandy clay and silty clay soil are considered to be moderately limited soil materials and are subject to evaluation with other influencing factors and local conditions.

(c) Clay, bedrock, oolitic limestone, fractured rock, hardpan, organic soil, gravel and coarse sand, when coarse sand is associated with an estimated wet season high water table within 48" inches of the absorption surface are severely limited soil materials. If severely limited soil material can be replaced with slightly limited soil material, see Footnotes 3 and 4 of Table III for minimum requirements. Where limestone is found to be discontinuous along the horizontal plane and is dispersed among slightly or moderately limited soils, the Department Policy for Drainfield Sizing in Areas With Discontinuous Limestone, August 1999, (formerly from Department of Health), herein incorporated by reference, shall be used.

(2) The water table elevation at the wettest season of the year is at least 24" inches below the bottom surface of the drainfield. In addition, systems shall not be located where the undrained, naturally occurring wet season water table elevation in the area of the proposed system installation is determined to be at or above the elevation of the existing ground surface. However, when sufficient slightly limited fill material is permitted to be placed on the property to construct a properly designed onsite sewage treatment and disposal system, the Department shall authorize construction based on the final lot elevation. This provision does not authorize a property owner to fill or modify the site without first obtaining necessary permits for site preparation work from other agencies of government having jurisdiction. The following information shall be used in determining the wet season water table elevation:

- (a) U.S. Department of Agriculture Soil Conservation Service soils maps and soil interpretation records.
 - (b) Evaluation of soil color and the presence or absence of mottling.
 - (c) Evaluation of impermeable or semi-permeable soil layers.
 - (d) Evaluation of onsite vegetation.
 - (e) An onsite evaluation of the property which has used the above referenced sources of information and which has considered the season of the year when the evaluation was performed, historic weather patterns, and recent rainfall events.
- (3) Setbacks in subsections 62-6.005(1), (2), (3) and (4), F.A.C., are met.
- (4) The site of the installation and the additional required unobstructed land referred to in subsection 62-6.005(4), F.A.C., shall not be covered with asphalt or concrete, or be subject to vehicular traffic or other activity as defined in subsection 62-6.002(41),

F.A.C., which would adversely affect the soil, or the operation of the system.

(5) The site of the installation and the additional required unobstructed land referred to in subsection 62-6.005(4), F.A.C., is not subject to saturation from sources such as artificial drainage of ground surfaces, driveways, roads or roof drains.

(6) The existing lot elevation at the site of the proposed system installation and any contiguous land referred to in subsection 62-6.005(4), F.A.C., shall not be subject to frequent flooding. Except for areas affected by Section 381.0065(4)(s), F.S., fill material, if permitted, shall be placed in the area for the system and contiguous unobstructed area to raise the lot elevation above the 2 year flood.

(7) All materials incorporated herein may be obtained from the Department of Environmental Protection, Onsite Sewage Program at www.floridadep.gov or 2600 Blair Stone Road, MS #3596, Tallahassee, Florida 32399-2400.

Rulemaking Authority 381.0011(4), (13), 381.0065(3)(a) FS. Law Implemented 381.0065, 381.00655 FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.47, Amended 3-17-92, 4-16-92, 1-3-95, Formerly 10D-6.047, Amended 3-22-00, 11-26-06, Formerly 64E-6.006.

62-6.008 System Size Determinations.

(1) Minimum design flows for systems serving any structure, building or group of buildings shall be based on the estimated daily sewage flow as determined from Table I or the following:

(a) The Department shall accept, for other than residences and food operations, metered water use data in lieu of the estimated sewage flows set forth in Table I. For metered flow consideration, the applicant shall provide authenticated monthly water use data documenting water consumption for the most recent 12 month period for at least six similar establishments. Similar establishments are those like size operations engaged in the same type of business or service, which are located in the same type of geographic environment, and which have approximately the same operating hours. Metered flow values will not be considered to be a reliable indicator of typical water use where one or more of the establishments utilized in the sample has exceeded the monthly flow average for all six establishments by more than 25 percent or where the different establishments demonstrate wide variations in monthly flow totals. When metered flow data is accepted in lieu of estimated flows found in Table I, the highest flow which occurred in any month for any of the six similar establishments shall be used for system sizing purposes. Except for food operations which exceed domestic sewage waste quality parameters as defined in subsection 62-6.002(15), F.A.C., where an existing establishment which has been in continuous operation for the previous 24 months seeks to utilize its own metered flows, the applicant shall provide authenticated monthly water use data documenting water consumption for the most recent 24 month period. The highest monthly metered flow value for an existing establishment shall be used for system sizing purposes.

(b) When onsite systems use multiple strategies to reduce the total estimated sewage flow or the drainfield size, only one reduction method shall be credited.

TABLE I FOR SYSTEM DESIGN ESTIMATED SEWAGE FLOWS	
TYPE OF ESTABLISHMENT	GALLONS PER DAY
COMMERCIAL:	
Airports, Bus Terminals, Train Stations, Port & Dock Facilities, Bathroom Waste Only	
(a) Per passenger	4
(b) Add per employee per 8 hour shift	15
Barber & beauty shops per service chair	75
Bowling alley bathroom waste only per lane	50
Country Club	
(a) Per resident	100
(b) Add per member or patron	25
(c) Add per employee per 8 hour shift	15
Doctor and Dentist Offices	
(a) Per practitioner	250

(b) Add per employee per 8 hour shift	15
Factories, Exclusive of Industrial Wastes Gallons Per Employee Per 8 Hour Shift	
(a) No showers provided	15
(b) Showers provided	25
Flea Market Open 3 or Less Days Per Week	
(a) Per non-food service vendor space	15
(b) Add per food service establishment using single service articles only per 100' Square feet of floor space	50
(c) Per limited food service establishment	25
(d) For flea markets open more than 3 days per week estimated flows shall be doubled	
Food Operations	
(a) Restaurant operating 16 hours or less per day per seat	40
(b) Restaurant operating more than 16 hours per day per seat	60
(c) Restaurant using single service articles only and operating 16 hours or less per day per seat	20
(d) Restaurant using single service articles only and operating more than 16 hours per day per seat	35
(e) Bar and cocktail lounge per seat	20
Add per pool table or video game	15
(f) Drive-in restaurant per car space	50
(g) Carry out only, including caterers	
1. Per 100' square feet of floor space	50
2. Add per employee per 8 hour shift	15
(h) Institutions per meal	5
(i) Food Outlets excluding deli's, bakery, or meat department per 100' square feet of floor space	10
1. Add for deli per 100' square feet of deli floor space	40
2. Add for bakery per 100' square feet of bakery floor space	40
3. Add for meat department per 100' square feet of meat department floor space	75
4. Add per water closet	200
Hotels & Motels	
(a) Regular per room	100
(b) Resort hotels, camps, cottages per room	200
(c) Add for establishments with self service laundry facilities per machine	750
Mobile Home Park	
(a) Per single wide mobile home space, less than 4 single wide spaces connected to a shared onsite system	250
(b) Per single wide mobile home space, 4 or more single wide spaces are connected to a shared onsite system	225
(c) Per double wide mobile home space, less than 4 double wide mobile home spaces connected to a shared onsite system	300
(d) Per double wide mobile home space, 4 or more double wide mobile home spaces connected to a shared onsite system	275
Office Building	
Per employee per 8 hour shift, or	15
Per 100' square feet of floor space, whichever is greater	15
Transient Recreational Vehicle Park	
(a) Recreational vehicle space for overnight stay, without water and sewer hookup per vehicle space	50
(b) Recreational vehicle space for overnight stay, with water and sewer hookup per vehicle space	75

Service Stations Per Water Closet	
(a) Open 16 hours per day or less	250
(b) Open more than 16 hours per day	325
Shopping centers without food or laundry per square foot of floor space	0.1
Stadiums, race tracks, ball parks per seat	4
Stores per bathroom	200
Swimming and bathing facilities, public per person	10
Theatres and Auditoriums, per seat	4
Veterinary Clinic	
(a) Per practitioner	250
(b) Add per employee per 8 hour shift	15
(c) Add per kennel, stall or cage	20
Warehouse	
(a) Add per employee per 8 hour shift	15
(b) Add per loading bay	100
(c) Self-storage, per unit (up to 200 units)	1
Add 1 gallon for each 2 units or fraction thereof, for over 200 units, and shall be in addition to employees, offices or living quarters flow rates.	
INSTITUTIONAL:	
Churches per seat which includes kitchen wastewater flows unless meals prepared on a routine basis	3
If meals served on a regular basis add per meal prepared	5
Hospitals per bed which does not include kitchen wastewater flows	200
Add per meal prepared	5
Nursing, rest homes, adult congregate living facilities per bed which does not include kitchen wastewater flows	100
Add per meal prepared	5
Parks, Public Picnic	
(a) With toilets only per person	4
(b) With bathhouse, showers & toilets per person	10
Public institutions other than schools and hospitals per person which does not include kitchen wastewater flows	100
Add per meal prepared	5
Schools Per Student	
(a) Day-type	10
(b) Add for showers	4
(c) Add for cafeteria	4
(d) Add for day school workers	15
(e) Boarding-type	75
Work/construction camps, semi-permanent per worker	50
RESIDENTIAL:	
Residences	
(a) Single or multiple family per dwelling unit	
1 Bedroom with 750' square feet or less of building area	100
2 Bedrooms with 751-1,200' square feet of building area	200
3 Bedrooms with 1,201-2,250' square feet of building area	300

4 Bedrooms with 2,251-3,300' square feet of building area	400
For each additional bedroom or each additional 750' square feet of building area or fraction thereof in a dwelling unit, system sizing shall be increased by 60 gallons per dwelling unit.	
(b) Other per occupant	50

Footnotes to Table I:

1. For food operations, kitchen wastewater flows shall normally be calculated as 66 percent of the total establishment wastewater flow.

2. Systems serving high volume establishments, such as restaurants, convenience stores and service stations located near interstate type highways and similar high-traffic areas, require special sizing consideration due to expected above average sewage volume. Minimum estimated flows for these facilities shall be 3.0 times the volumes determined from the Table I figures.

3. For residences, the volume of wastewater shall be calculated as 50 percent blackwater and 50 percent graywater.

4. Where the number of bedrooms indicated on the floor plan and the corresponding building area of a dwelling unit in Table I do not coincide, the criteria which will result in the greatest estimated sewage flow shall apply.

5. Convenience store estimated sewage flows shall be determined by adding flows for food outlets and service stations as appropriate to the products and services offered.

6. Estimated flows for residential systems assumes a maximum occupancy of two persons per bedroom. Where residential care facilities will house more than two persons in any bedroom, estimated flows shall be increased by 50 gallons per each additional occupant.

(2) Minimum effective septic tank capacity and total dosing tank capacity shall be determined from Table II. However, where multiple family dwelling units are jointly connected to a septic tank system, minimum effective septic tank capacities specified in the table shall be increased 75 gallons for each dwelling unit connected to the system. With the exception noted in paragraph 62-6.013(2)(a), F.A.C., all septic tanks shall be multiple chambered or shall be placed in series to achieve the required effective capacity. The use of an approved outlet filter device shall be required. Outlet filters shall be installed within or following the last septic tank or septic tank compartment before distribution to the drainfield. The outlet filter device requirement includes blackwater tanks, but does not include graywater tanks or grease interceptors or laundry tanks. Outlet filter devices shall be placed to allow accessibility for routine maintenance. Utilization and sizing of outlet filter devices shall be in accordance with the manufacturers' recommendations. The approved outlet filter device shall be installed in accordance with the manufacturers' recommendations. The Division of Water Resource Management, Onsite Sewage Program shall approve outlet filter devices per the Department's Policy on Approval Standards For Onsite Sewage Treatment And Disposal Systems Outlet Filter Devices, November 2008, (formerly from Department of Health) which is herein incorporated by reference.

TABLE II SEPTIC TANK AND PUMP TANK CAPACITY			
AVERAGE SEWAGE FLOW	SEPTIC TANK MINIMUM EFFECTIVE CAPACITY GALLONS	PUMP TANK MINIMUM TOTAL CAPACITY GALLONS	
GALLONS/DAY		Residential	Commercial
0-200	900	150	225
201-300	900	225	375
301-400	1,050	300	450
401-500	1,200	375	600
501-600	1,350	450	600
601-700	1,500	525	750
701-800	1,650	600	900
801-1,000	1,900	750	1,050
1,001-1,250	2,200	900	1,200
1,251-1,750	2,700	1,350	1,900

1,751-2,500	3,200	1,650	2,700
2,501-3,000	3,700	1,900	3,000
3,001-3,500	4,300	2,200	3,000
3,501-4,000	4,800	2,700	3,000
4,001-4,500	5,300	2,700	3,000
4,501-5,000	5,800	3,000	3,000

(3) Where a separate graywater tank and drainfield system is used, the minimum effective capacity of the graywater tank shall be 250 gallons with such system receiving not more than 75 gallons of flow per day. For graywater systems receiving flows greater than 75 gallons per day, minimum effective tank capacity shall be based on the average daily sewage flow plus 200 gallons for sludge storage. Design requirements for graywater tanks are described in subsection 62-6.013(2), F.A.C. Where separate graywater and blackwater systems are utilized, the size of the blackwater system can be reduced, but in no case shall the blackwater system be reduced by more than 25 percent. However, the minimum capacity for septic tanks disposing of blackwater shall be 900 gallons.

(4) Where building codes allow separation of discharge pipes of the residence to separate stubouts and where lot sizes and setbacks allow system construction, the applicant may request a separate laundry waste tank and drainfield system. Where an aerobic treatment unit is used, all blackwater, graywater and laundry waste flows shall be consolidated and treated by the aerobic treatment unit. Where a residential laundry waste tank and drainfield system is used:

(a) The minimum laundry waste trench drainfield absorption area for slightly limited soil shall be 75 square feet for a one or two bedroom residence with an additional 25 square feet for each additional bedroom. If an absorption bed drainfield is used the minimum drainfield area shall be 100 square feet with an additional 50 square feet for each additional bedroom over two bedrooms. The Department shall require additional drainfield area based on moderately limited soils and other site specific conditions, which shall not exceed twice the required amount of drainfield for a slightly limited soil.

(b) The laundry waste interceptor shall meet requirements of subsections 62-6.013(2) and (8), F.A.C.

(c) The drainfield absorption area serving the remaining wastewater fixtures in the residence shall be reduced by 25 percent.

(5) The minimum absorption area for standard subsurface drainfield systems, graywater drainfield systems, and filled systems shall be based on estimated sewage flows and Table III so long as estimated sewage flows are 200 gallons per day or higher. When estimated sewage flows are less than 200 gallons per day, system size shall be based on a minimum of 200 gallons per day.

TABLE III FOR SIZING OF DRAINFIELDS OTHER THAN MOUNDS			
U.S. DEPARTMENT OF AGRICULTURE SOIL TEXTURAL	SOIL TEXTURE LIMITATION	MAXIMUM SEWAGE LOADING RATE TO TRENCH & BED ABSORPTION SURFACE IN GALLONS PER SQUARE FOOT PER DAY	
CLASSIFICATION	(PERCOLATION RATE)	TRENCH	BED
Sand; Coarse Sand not associated with a seasonal water table of less than 48 inches; and Loamy Coarse Sand	Slightly limited (Less than 2 min/inch)	0.80	0.60
Loamy Sand; Sandy Loam; Coarse Sandy Loam; and Fine Sand;	Slightly limited (2-4 min/inch)	0.80	0.60
Loam; Fine Sandy Loam; Silt Loam; Very Fine Sand; Very Fine Sandy Loam; Loamy Fine Sand; Loamy Very Fine Sand; and Sandy Clay Loam	Moderately limited (5-10 min/inch)	0.65	0.35
Clay Loam; Silty Clay Loam; Sandy Clay; Silty Clay; and Silt	Moderately limited (Greater than 15 min/inch but not exceeding 30 min/inch)	0.35	0.20
Clay; Organic Soils; Hardpan; and Bedrock	Severely limited (Greater than 30 min/inch)	Unsatisfactory for standard subsurface	

		system	
Coarse Sand with an estimated wet season high water table within 48 inches of the bottom of the proposed drainfield; Gravel or Fractured Rock or Oolitic Limestone	Severely limited (Less than 1 min/inch and a water table less than 4 feet below the drainfield)	Unsatisfactory for standard subsurface system	

Footnotes to Table III:

1. U.S. Department of Agriculture major soil textural classification groupings and methods of field identification are explained in Chapter 3 of the Soil Survey Manual, United States Department of Agriculture, Handbook No. 18, Issued March 1971, herein adopted and incorporated by reference in paragraph 62-6.004(3)(c), F.A.C. Laboratory sieve analysis of soil samples may be necessary to confirm field evaluation of specific soil textural classifications. The USDA Soil Conservation Service "Soil Textural Triangle" shall be used to classify soil groupings based on the proportion of sand, silt and clay size particles.

2. The permeability or percolation rate of a soil within a specific textural classification may be affected by such factors as soil structure, cementation and mineralogy. Where a percolation rate is determined using the falling head percolation test procedure described in the United States Environmental Protection Agency Design Manual for Onsite Wastewater Treatment and Disposal Systems, October, 1980, incorporated by reference into this rule, the calculated percolation test rate shall be used with Table III and evaluated by the Department with other factors such as history of performance of systems in the area in determining the minimum sizing for the drainfield area.

3. When all other site conditions are favorable, horizons or strata of moderately or severely limited soil may be replaced with slightly limited soil or soil of the same texture as the satisfactory slightly limited permeable layer lying below the replaced layer. The slightly limited permeable layer below the replaced layer shall be identified within the soil profile which was submitted as part of the permit application. The resulting soil profile must show complete removal of the moderately or severely limited soil layer being replaced and must be satisfactory to a minimum depth of 54" inches beneath the bottom surface of the proposed drainfield. The width of the replacement area shall be at least 2' feet wider and longer than the drain trench and for absorption beds shall include an area at least 2' feet wider and longer than the proposed bed. Drainfields shall be centered in the replaced area. Where at least 33 percent of the moderately limited soils at depths greater than 54" inches below the bottom of the drainfield have been removed to the depth of slightly limited soil, drainfield sizing shall be based on the following sewage loading rates. Where severely limited soils are being removed at depths greater than 54" inches below the bottom of the drainfield, 100 percent of the severely limited soils at depths greater than 54 inches shall be removed down to the depth of an underlying slightly limited soil. Maximum sewage loading rates for standard subsurface systems installed in replacement areas shall be 0.80 gallons per square foot per day for trench systems and 0.60 gallons per square foot per day for absorption beds in slightly limited soil textures. Where moderately limited soil materials are found beneath the proposed drainfield, and where system sizing is based on that moderately limited soil, soil replacements of less than 33% may be permitted.

4. Where coarse sand, gravel, or oolitic limestone directly underlies the drainfield area, the site shall be approved provided a minimum depth of 42" inches of the rapidly percolating soil beneath the bottom absorption surface of the drainfield and a minimum 12" inches of rapidly percolating soil contiguous to the drainfield sidewall absorption surfaces, is replaced with slightly limited soil material. Where such replacement method is utilized, the drainfield size shall be determined using a maximum sewage application rate of 0.80 gallons per square foot per day of drainfield in trenches and 0.60 gallon per square foot per day for drainfield absorption beds.

5. Where more than one soil texture classification is encountered within a soil profile and it is not removed as part of a replacement, drainfield sizing for standard subsurface drainfield systems and fill drainfield systems shall be based on the most restrictive soil texture encountered within 24 inches of the bottom of the drainfield absorption surface.

(6) All materials incorporated herein may be obtained from the Department of Environmental Protection, Onsite Sewage Program at www.floridadep.gov or 2600 Blair Stone Road, MS #3596, Tallahassee, Florida 32399-2400.

Rulemaking Authority 381.0065(3)(a) FS. Law Implemented 381.0065 FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.48, Amended 3-17-92, 1-3-95, Formerly 10D-6.048, Amended 11-19-97, 3-22-00, 9-5-00, 11-26-06, 6-25-09, 7-16-13, Formerly 64E-6.008.

62-6.009 Alternative Systems.

When approved by the 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. Unless otherwise noted, all rules pertaining to siting, construction, and maintenance of standard subsurface systems must apply to alternative systems. In addition, the Department may, using the criteria in subsection 62-6.004(4), F.A.C., require the submission of plans prepared by an engineer licensed in the State of Florida, prior to considering the use of any alternative system.

(1) Waterless, incinerating or organic waste composting toilets – may be approved for use if found in compliance with standards for Wastewater Recycle/Reuse and Water Conservation Systems as defined by ANSI/NSF International Standard Number 41-2018 “Non-liquid Saturated Treatment Systems” (September 2018) or NSF International Protocol P157-2019 “Incinerating Toilet Systems-Health and Sanitation” (January 2019) hereby adopted and incorporated by reference, and provided that graywater and any other liquid and solid waste is properly collected and disposed of in accordance with standards established in this chapter. These standards have been deemed copyright protected and are available from the publisher at NSF International, 789 North Dixboro Road Ann Arbor, Michigan 48105, or at publisher’s website at www.nsf.org, and are available for inspection as provided in subsection (11) below. For residences, the required drainfield absorption surface and unobstructed area of the system treating the remaining sewage flow must be reduced by 25% when waterless, incinerating or organic waste composting toilets are used exclusively for all toilet wastes. Solids removed from waterless, incinerating or organic waste composting toilets must be mixed with lime, containerized, and disposed of with the solid waste from the establishment. Liquids discharging from waterless, incinerating or organic waste composting toilets must be plumbed into the onsite system serving the establishment.

(2) Sanitary pit privy – shall not be permitted except at remote locations where electrical service is unavailable. In no case shall such installations be permitted for permanent residences.

(3) Mound systems – are used to overcome certain limiting site conditions such as an elevated seasonal high water table, shallow permeable soil overlying slowly permeable soil and shallow permeable soil located over creviced or porous bedrock. Special installation instructions or design techniques to suit a particular site shall, using the criteria in subsection 62-6.004(4), F.A.C., be specified on the construction permit in addition to the following general requirements.

(a) Site preparation must render the site in compliance with requirements of subsections 62-6.006(1)-(6), F.A.C.

(b) Prior to the construction of a mound system, the applicant may fill all or a portion of a lot utilizing slightly limited soil.

(c) The O horizon of original topsoil and vegetation must be removed from beneath the drainfield, shoulder and slope area and the exposed underlying soil plowed or roughened to prevent formation of an impervious barrier between the fill and natural soil. Moderately limited soil material may be used in the construction of mound systems, but shall only be used in the construction of mound slopes and the soil cap. If moderately or severely limited soil is to be replaced beneath the mound, Rule 62-6.008, F.A.C., Table III, footnote 3. shall be followed.

(d) Where the soil material underlying a mound system is of a similar textural material as that used in system construction, the mound drainfield size shall be based on estimated sewage flows as specified in Rule 62-6.008, F.A.C., Table I and upon the quality of fill material utilized in the mound system. When estimated sewage flows are calculated to be less than 200 gallons per day, specifications for system design shall be based on a minimum flow of 200 gallons per day. Maximum sewage loading rates for soils used in mound construction shall be in compliance with the following:

Fill Material	Maximum Sewage Loading Rate to Mound Drain Trench Bottom Surface in gallons per square foot per day	Maximum Sewage Loading Rate to Mound Absorption Bed Bottom Surface in gallons per square foot per day
Sand; Coarse Sand; and Loamy Coarse Sand	0.80	0.60
Fine Sand;	0.80	0.60
Sandy Loam; Coarse Sandy Loam; and Loamy Sand	0.65	0.40
Fine Sandy Loam; Very Fine Sand; Loamy Fine Sand; and Loamy Very Fine Sand	0.35	0.25

(e) Where moderately limited soils underlie the mound within 36" inches of the bottom of the drainfield, drainfield sizing shall be based on the most restrictive soil texture existing in the profile to a depth of 36" inches below the bottom of the drainfield, using

Table III for soil loading rates.

(f) There shall be a minimum 4' feet separation between the shoulder of the fill and the nearest trench or absorption bed sidewall. Where a portion of the mound slope will be placed adjacent to building foundations, pilings or supports for elevated structures, mobile home walls, swimming pool walls, retaining walls, or similar obstructions there shall be a minimum 5' foot separation between the sidewall of the absorption area and the obstruction. Such obstructions shall impact the slope on no more than 50 percent of the shoulder perimeter. Retaining walls must be designed by a professional engineer licensed in the State of Florida to withstand the lateral earth forces under saturated conditions and to prevent seepage. Where mounds are placed on slopes exceeding 2 percent, the toe of the slope on the downslope side of the mound shall extend an additional 4" inches for each additional 1 percent of slope. To taper the maximum elevation of the mound at the outer perimeter of the shoulder down to the toe of the slope, additional moderately or slightly limited fill shall be placed at a minimum 2' foot horizontal to 1' foot vertical grade where mound height does not exceed 36" inches. Mound heights which exceed 36" inches shall have a slope not steeper than 3' foot horizontal to 1' foot vertical. The entire mound including slopes, shoulders and the soil cap shall be stabilized with vegetation. Slopes steeper than 5:1 shall be sodded or hydroseeded. Soil caps and unsodded slopes must, at a minimum, be hydroseeded or seeded with grass and a layer of hay or similar cover. Where fill material is present in the amount so as to provide a level surface from the top of the required cover over the system over the area where the slopes would normally be located, no slopes shall be required. For example, if the neighboring lot has been permanently filled to the same level as the applicant's lot, a five-foot separation from the property line to the system will be required, as opposed to requiring the slope area. Stabilization of a mound shall be the responsibility of the septic tank contractor who constructed the mound system unless the written agreement for system construction clearly states the system owner is responsible. Mound slopes which do not conform to permit requirements shall at a minimum be restored to permit specifications prior to stabilizing. Other synthetic or vegetative covers providing protection from mound erosion equal to or better than sod shall be approved by the Department. Final installation approval shall not be granted until sodding, hydroseeding, seeding and haying or other approved stabilization of the mound has occurred. No portion of the drainfield or shoulder area shall be covered with asphalt or a concrete driveway or be subject to vehicular traffic. Landscaping features such as boulders or trees which obstruct drainfield or fill shoulder area shall not be used. Hydroseeding shall be performed in accordance with the product manufacturer's instructions and Section 7.5, Permanent Seeding, of the Florida Erosion and Sedimentation Control Inspector's Manual, July 2008, herein incorporated by reference.

(g) There shall be a soil cap of slightly or moderately limited soil material over the drainfield and shoulder area. The soil cap shall be no less than 6" inches thick at the outer perimeter of the shoulder. Additional soil cap material shall be placed over the mound and graded to provide drainage off and away from the mound. The maximum depth from the bottom of the drainfield to the finished ground surface shall not exceed 30 inches after natural settling.

(h) The site shall be landscaped according to permit specifications and shall be protected from automotive traffic or other activity that could damage the system. Swales or other surface drainage structures shall be utilized to prevent water shed from mounds draining onto neighboring property.

(i) All fill material used in the construction of systems shall be free of extraneous non-soil material such as grass, roots and any other debris. Shell fragments less than 2.0 mm in diameter are excluded from the classification of extraneous non-soil materials and are considered to be soil particles. Severely limited soil material shall not be used in system construction. Fill material consisting of mechanically crushed and sieved rock shall not be used in system construction.

(j) Where moderately limited soil is used to construct a mound system, a low pressure distribution network is required.

(4) Filled systems – filled systems shall be constructed in accordance with the minimum requirements for mounds, except as provided for in footnote 5., Table III, and that sewage loading rates to trench or absorption bed bottom areas shall be based on values found in Table III.

(5) Drip irrigation systems – Drip irrigation systems may, at the option of the applicant, be used in lieu of a mineral aggregate drainfield. Drip irrigation systems must meet all requirements of this chapter except as noted below.

(a) Drip irrigation systems must receive effluent from an approved aerobic treatment unit or a performance-based treatment system designed to meet at least secondary treatment standards for CBOD₅ and TSS, and must meet the following requirements:

1. Drip irrigation systems shall be designed by an engineer licensed in the State of Florida.
2. The infiltrative area required shall be the same as the area required for a mineral aggregate drainfield with reductions allowed for the reduction of CBOD₅ and TSS as noted in this chapter for aerobic treatment units.
3. In an absorption bed configuration, the drainfield area shall be calculated as extending one foot beyond the sides of the

outermost emitter lines. Notwithstanding the provision of paragraph 62-6.014(5)(b), F.A.C., the individual bed size limitation of 1500 square feet does not apply to drip emitter systems.

4. In a trench containing a single emitter line, the drainfield area shall be calculated as 2' feet multiplied by the emitter spacing in feet multiplied by the number of emitters.

5. Drip effluent disposal systems shall be considered pressure distribution systems. Head loss calculations shall be provided to insure proper hydraulic pressure at the emitter. Pump selection shall be indicated in the design specifications. Pump performance curves shall be included in the permit application.

6. Recirculation rates shall be in the design specifications.

7. Check valves, petcocks, inline filters, and vacuum breaking device locations shall be shown on the design drawings.

8. Drip irrigation systems shall be time-dosed over the 24-hour period. Demand control dosing shall override timed-dosing in periods of flow where timed dosing cannot accommodate the excessive flow.

9. Emitter lines shall be designed as a continuous loop circuit with no dead-ends.

10. Emitter lines shall be drawn to scale and emitter spacing shall be indicated on the drawings.

11. Vacuum release valves shall be installed at the highpoint of the emitter lines.

12. The maximum emitter longitudinal spacing on an emitter line shall be 2' feet. The maximum spacing between adjacent emitter lines in an absorption bed configuration shall be 2' feet. The 24'-inch separation from the seasonal high water table shall be measured from the emitter orifice. Setbacks shall be measured from the drip emitter lines.

13. The setback from drip emitter lines to building foundations and property lines shall be no less than two feet.

14. The definition of a filled system in Rule 62-6.002, F.A.C., is not applicable to drip effluent disposal systems. A drip effluent disposal system is considered to be a mound system when any part of the bottom surface of any drip emitter line is located at or above the elevation of undisturbed native soil in the drainfield area. A drip effluent disposal system is considered a standard subsurface drainfield system when the entire bottom surface of every drip emitter line is installed below the elevation of undisturbed native soil in the drainfield area.

15. For mound systems there shall be a minimum 18'-inch separation between the shoulder of the fill and the nearest drip emitter line. Mound system slopes shall be in accordance with paragraph 62-6.009(3)(f), F.A.C., except that a minimum 2' foot separation is required between the nearest drip emitter line and a building foundation, retaining wall, or similar obstruction. Mound systems shall be stabilized in accordance with paragraph 62-6.009(3)(f), F.A.C.

16. For standard subsurface systems, the elevation of any fill covering the drainfield shall extend no less than 18 inches away from all emitter lines before tapering down to natural grade.

17. Minimum cover on the emitter lines shall be 6" inches for all drip irrigation systems. The maximum cover for all drip irrigation systems shall be no greater than 12" inches.

18. The system shall include a petcock on the dosing pump discharge line for effluent sampling.

19. All systems shall incorporate an automatic mechanism for backwashing or flushing the drip lines and filters.

20. All onsite sewage treatment and disposal systems that include a drip effluent disposal system and aerobic treatment unit or performance-based treatment system shall have a biennial operating permit, a maintenance contract with an approved maintenance entity, and shall be inspected in accordance with the requirements of this chapter.

21. Drip irrigation systems shall be designed to have a minimum operating pressure at the emitter head of 10 PSI, a maximum operating pressure at the emitter head of 45 PSI, a maximum system operating pressure of 60 PSI, and a maximum discharge rate per emitter of 1.5 gallons per hour.

22. The hydraulic surge storage requirement of Rule 62-6.028, F.A.C., does not apply to drip irrigation systems.

23. Drip irrigation systems must only use components approved by the Onsite Sewage Program.

24. Unobstructed area for drip irrigation systems may be located anywhere on the establishment property that meets the setbacks for unobstructed area and can be accessed via transmission lines, supply lines and return lines installed in accordance with this chapter. The land containing only transmission lines, supply lines and return lines shall not be included in the calculation of unobstructed area.

25. Supply lines and return lines shall be considered as transmission lines for determining setbacks not specified in this section.

26. Except for slopes required to meet the stabilization requirements of paragraph 62-6.009(3)(f), F.A.C., the area over the drip irrigation drainfield shall be stabilized in the same way or vegetated with plant species specified by the design engineer. The species specified shall not include trees.

27. For drip emitter lines using non-pressure-compensating emitters, the maximum elevation difference shall be four inches between the highest and the lowest emitter in any individual line segment between the supply and the return line. For drip emitter lines using pressure-compensating emitters, there shall be no more than 18" inches of elevation difference between the highest and lowest emitter in any line. Neither property slope nor drip emitter line slope shall result in the depth of cover over the drip emitter lines to be outside of the range permitted in subparagraph 62-6.009(5)(a)17., F.A.C.

28. The minimum effective soil depth below drip emitter lines shall be 42" inches; however, spodic layers greater than 24" inches below the drip emitter lines may remain in place at the discretion of the design engineer.

(b) Drip irrigation systems shall be monitored during required maintenance visits by visual inspection of the ground surface above the emitter lines for evidence of soil saturation at the ground surface.

(6) Tire chip aggregate systems – tire chip aggregate may be used as a substitute for mineral aggregate in onsite sewage treatment and disposal system drainfields under the following conditions:

(a) The tire chips meet the specifications for mineral aggregate found in this chapter: Mixed tire and mineral aggregate shall be approved where each type of aggregate meets its respective standard and the combined mixture meets the gradation requirements in paragraph 62-6.014(5)(c), F.A.C.

(b) Exposed wire protrudes no more than one-half (1/2) inch from 90% of the chips.

(c) At least 80% of the bead wire has been removed from the tires to be chipped.

(d) The system receives domestic wastewater only.

(e) Tire chip aggregate shall not be used where the seasonal high water table is less than 12" inches below the bottom of the drainfield at the wettest season of the year.

(f) In all other respects tire chip aggregates and mixed tire-mineral aggregates shall be installed with identical site restrictions and construction requirements as approved mineral aggregates.

(7) In-ground Nitrogen-reducing Biofilters (INRB) – As described in this subsection, are defined as an arrangement of materials installed in layers underneath a drainfield for the purpose of reducing the mean total nitrogen (TN) by acting as a biological filter. INRB layers, also referred to as media layers, may be placed beneath the drainfield provided the resulting system meets all requirements of this chapter except as noted in this subsection. All repairs or modifications to existing INRB systems will be required to meet the standards of this subsection. The target removal effectiveness for mean TN is a minimum of 65% for all INRB.

(a) Where a liner is used as part of the INRB design, the INRB must be designed by a professional engineer, and must be installed per paragraph (c) or (d) below. For INRBs using liners, the engineer must inspect the liner and Media Layer 2 of the system prior to the Department's construction inspection. Final system approval will not be granted until the engineer has supplied the following in a report to the Department: liner and Media Layer 2 inspection report; an as-built cross section with elevations; a dimensioned plan view of the installed INRB system; and a statement indicating that the system has been installed in conformance with permitting requirements. The engineer's liner and Media Layer 2 inspection report satisfy the Media Layer 2 inspection requirements of paragraph (e) below. Where paragraph (c) or (d) does not modify a standard found in paragraph (b), the standard found in paragraph (b) will apply.

(b) INRB layers must be installed as follows:

1. The drainfield must be installed centered over sand fill material (Media Layer 1) that is at least 18" inches thick and conforms to the textures and colors in subparagraph 10. below. Media Layer 1 must extend beneath the entire drainfield absorption surface and to a point at least one foot beyond the perimeter of any portion of the drainfield absorption surface.

2. Below Media Layer 1 there must be a layer of nitrogen-reducing media and fine aggregate mix (Media Layer 2) that is at least 12 inches thick and extends beneath the entire drainfield absorption surface and extends at least 24" inches beyond the perimeter of any portion of the drainfield absorption surface. Media Layer 2 must also extend upward along the boundary of Media Layer 1 to a point four to six inches below the bottom of the drainfield. Media Layer 1 must be centered above Media Layer 2. Media Layer 2 must conform with subparagraphs 8. and 11. below.

3. The bottom of Media Layer 2 must be at least 6" inches above the wet-season water table.

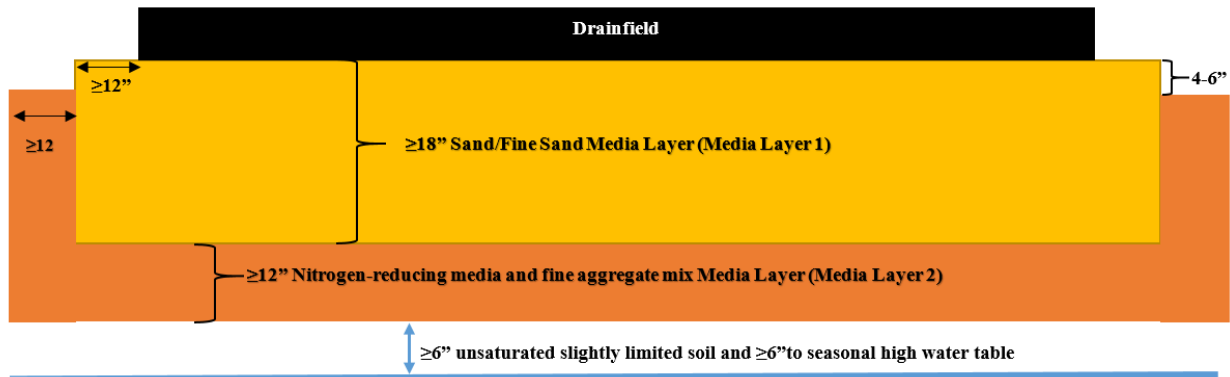


Figure 1. In-ground Nitrogen-reducing Biofilter media layer system

4. Media longevity and nutrient reduction may be enhanced by the use of low-pressure distribution. Any Department-approved drainfield effluent distribution method may be used.

5. The existing soil profile throughout the area of the drainfield and the area where the INRB will be placed must indicate slightly limited soils extending from the existing ground surface to at least 36" inches below existing ground surface in addition to compliance with the effective soil depth requirements of subsection 62-6.006(1), F.A.C., for the installation of the drainfield.

6. Only drainfield materials approved per Rule 62-6.014 or 62-6.009, F.A.C., can be used.

7. As measured vertically, no portion of Media Layer 2 can be within 18" inches of the absorption surface of the drainfield.

8. An example of nitrogen-reducing media is lignocellulosic material such as chips or shavings of lumber, wood mulch, yellow pine sawdust, or 2"-inch to 3"-inch wood chips. All sources of lignocellulosic material must be untreated by preservatives. Lignocellulosic material must be free of extraneous non-woody materials such as plastic, metal, grass, leaves, and any other debris. The nitrogen-reducing media must be demonstrated in Florida-based domestic wastewater studies as innovative systems to be effective at providing a substrate for denitrification.

9. The nitrogen-reducing media must comply with the provisions of Rule 62-6.0151, F.A.C.

10. Media Layer 1 must consist of fine aggregate having a texture of sand or fine sand but excluding:

- a. Those having color values less than or equal to 4 with chromas less than or equal to 3; or
- b. Those with colors on the gley charts.

11. Media Layer 2 must be composed of 40-60% nitrogen-reducing media by volume, with the remainder to be fine aggregate and must not be installed when the observed water table at time of construction is at or above the lowest depth of Media Layer 2. The fine aggregate to be mixed with the nitrogen-reducing media must be one or more of the following textures: sand, fine sand, coarse sandy loam, sandy loam, loamy sand, fine sandy loam, very fine sand, loamy fine sand, and loamy very fine sand; and must conform to the colors in subparagraph 10., above. Media Layer 2 must shall be thoroughly mixed while the soil is in a non-plastic state, with the constituents uniformly distributed when installed.

12. Where the system has a total required drainfield size over 1,500' square feet, the design engineer must address the potential for mounding of the effluent between the drainfield and the bottom of Media Layer 2 at the estimated sewage flow and will increase the separation between the drainfield and Media Layer 2, to ensure Media Layer 1 maintains no less than 18 inches of unsaturated soil beneath the drainfield. A four-inch diameter observation port in the center of the drainfield must be installed to monitor this parameter. The observation port must be capped and lockable and installed within a protective surface cover. A toilet flange must be securely attached to the bottom of the observation port to prevent the port from being inadvertently raised from its installed position. The observation port, including the flange, must be perforated at the lowest elevation possible to allow accurate measurements. If installed within three feet of the sidewall of a bed or trench, the port must be grouted to prevent effluent from flowing down the outer surface of the port to the media.

13. Drainfield repair will not necessitate Media Layer 2 replacement provided the media has been in use for less than 10 years or if sampling within the previous 12 months shows denitrification at or above the target level for mean TN removal effectiveness which must be a minimum 65%.

14. Setback distances to the Media Layers 1 and 2 extending to the absorption surface of the drainfield will be reduced as follows:

- a. Except for building foundations, vertical obstructions and pilings for elevated structures, where the required setback is ≤ 5

feet, the setback must be reduced to one foot.

b. Where the required setback is ≥ 10 feet, the setback must be reduced by five feet.

c. Setbacks to all other parts of the system must comply with the requirements in this chapter and Section 381.0065, F.S.

(c) INRB layers with liner, no underdrain, must be installed in accordance with paragraph (b) above with the following variations:

1. The system drainfield must be low-pressure dosed unless the professional engineer chooses another method to provide nitrification. Lift-dosing may be used provided the design calculations show that the entire distribution network will be charged with each dose.

2. Media Layer 2 must be enclosed beneath, and on the lower 6-8" inches of all sides, by an impermeable liner composed of polyvinyl chloride (PVC), high-density polyethylene (HDPE), ethylene propylene diene methylene (EPDM) or other material having a thickness of at least 30 mils and being certified by the manufacturer for a minimum lifetime of 30 years buried in contact with sewage. If a manufacturer will not certify the liner for a minimum of 30 years, the engineer of record must choose a liner based on the manufacturer's product information regarding resistance to physical and chemical substances to which it will be subject over the thirty-year period. EPA-approved landfill liners may be considered by the engineer of record.

3. No portion of the liner or Media Layer 2 can be within 18" inches of the absorption surface of the drainfield.

4. The lowest point of the liner or Media Layer 2 must be no less than 6" inches above the wet-season water table. There must be at least 6" inches of unsaturated slightly limited soil between the bottom of the liner and the wet-season water table.

5. Media Layers 1 and 2 must extend beneath the entire drainfield absorption surface to a point at least 3.5' feet beyond the perimeter of any portion of the drainfield absorption surface. For repairs, the 3.5' feet dimension may be reduced incrementally to not less than 1.0' feet if necessary, to comply with a setback or if physical room is unavailable. Maintaining the 3.5 feet dimension will have a protection factor of 5 in determining the relative priority of competing factors in the application of Rule 62-6.015, F.A.C., Table V. No part of the liner can be placed within 12" inches of the pump or treatment tank.

6. Media Layer 1 must comply with subparagraph (b)10. above.

7. Media Layer 2 must comply with subparagraph (b)11. above, be at least 12" inches thick, and extend beneath the entire area below Media Layer 1.

8. The Department will not require sampling. Sampling may be required by the professional engineer, municipality or other state agency as necessary to comply with applicable regulatory requirements.

9. Where the system has a total required drainfield size over 1,500' square feet, the design engineer must address the potential for mounding of the effluent between the drainfield and the liner at the estimated sewage flow and will increase the separation between the drainfield and Media Layer 2 to ensure Media Layer 1 maintains no less than 18 inches of unsaturated soil beneath the drainfield. A four-inch diameter observation port must be installed in the center of the liner to allow the liquid level of effluent contained within the bottom of the media liner to be monitored. The observation port must be capped and lockable and installed within a protective surface cover. A toilet flange must be securely attached to the bottom of the observation port to prevent the port from being inadvertently raised from its installed position. The observation port, including the flange, must be perforated at the lowest elevation possible to allow accurate measurements. If installed within three feet of the sidewall of a bed or trench, the port must be grouted to prevent effluent from flowing down the outer surface of the port to the media.

10. The perimeter of the liner, in linear feet, multiplied by the perimeter loading rate must not be less than the estimated daily sewage flow for the system. The most restrictive soil texture between the elevation of the bottom of the drainfield and the elevation six inches below the bottom of the liner throughout the area of the installation and 24" inches beyond the perimeter of the liner will be used to determine the media layer perimeter loading rate.

PERIMETER LOADING RATE	
Soil Texture	Gallons/Linear Feet/Day
Coarse sand; sand; and loamy coarse sand	5
Fine sand	4
Loamy sand; coarse sandy loam; and sandy loam	3

11. The professional engineer may specify methods to replenish media and remove spent media if the continued presence of such spent media reduces the efficacy of the process and the methods do not compromise the efficacy of the system.

12. Any seams or penetrations through the liner must be sealed in accordance with the liner manufacturer's instructions to

prevent leakage for the life of the liner.

13. Setback distances to the liner, or to Media Layers 1 and 2 extending to the absorption surface of the drainfield will be reduced as follows:

- a. Except for building foundations, vertical obstructions and pilings for elevated structures, where the required setback is ≤ 5 feet, the setback will be reduced to one foot.
- b. Where the required setback is ≥ 10 feet, the setback will be reduced by five feet.
- c. Setbacks to all other parts of the system will comply with the requirements in this chapter and Section 381.0065, FS.

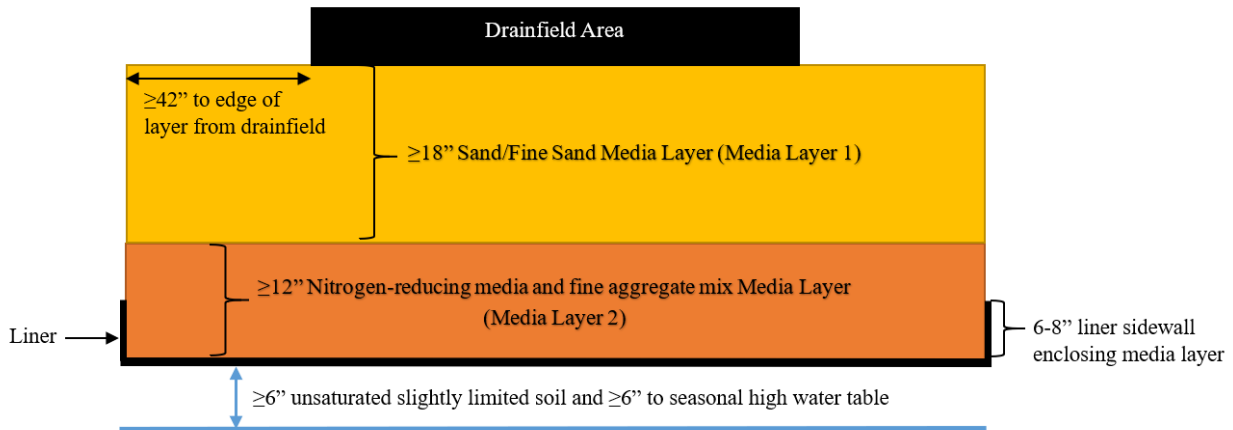


Figure 2. INRB with Liner without underdrain

(d) INRB layers with liner and underdrain, must be installed in accordance with paragraphs (a) and (b) above with the following variations:

1. The system drainfield must be low-pressure dosed unless the professional engineer chooses another method to provide nitrification. Lift-dosing may be used provided the design calculations show that the entire distribution network will be charged with each dose.

2. The drainfield must be installed and centered over Media Layer 1 which conforms to the textures and colors in subparagraph (b)10. Media Layer 1 must extend at least 18" inches past the perimeter of the drainfield.

3. Below Media Layer 1, Media Layer 2 must be installed and must extend at least 18 inches past the perimeter of the drainfield. Media Layer 2 must conform with subparagraphs (b)8., 9. and 11. above.

4. An impermeable liner meeting the construction standards of subparagraphs (c)2.-4., (c)9., and (c)12.-13. above, must be installed below Media Layer 2. The liner's interior surface must extend to a point at least 18" inches past the perimeter of the drainfield, at which point the liner must be directed upwards toward the ground surface maintaining contact with Media Layers 1 and 2, stopping at a point four to six inches below the level of the bottom of the drainfield. No portion of Media Layer 2 can be less than 18" inches below the absorption surface of the drainfield. Media Layer 2 with liner will extend beneath the entire drainfield absorption surface and extend at least 18" inches beyond the perimeter of any portion of the drainfield absorption surface. No part of the liner can be placed within 12" inches of the pump or treatment tank.

5. An underdrain must be installed on top of and in contact with the interior surface of the bottom of the liner within Media Layer 2 and must disperse to a separately sized, located and installed drainfield. The underdrain must be designed to maximize effluent movement through Media Layer 2 into the underdrain. The transmission line from the underdrain to the separate drainfield must be set to maintain saturation to the top of Media Layer 2. For gravity flow, in order to maintain distribution as high as possible above the wet-season water table and to maintain the shallowest depth to finished grade, the transmission line must have a slope between zero and 1/8" inch per foot when distributing the effluent to the separate drainfield.

6. Provided the effluent has passed vertically without pressure through Media Layer 1, the professional engineer may specify the separate drainfield that is separated from the wet-season water table by no less than 6" inches and the separate drainfield may be installed no more than 48" inches below final grade, provided there is slightly limited soils to a depth of 12" inches below the separate drainfield's absorption surface.

7. The minimum thickness of Media Layer 2 must be 12" inches from the top of the liner to the bottom of Media Layer 1. Media

Layer 2 thickness, as measured between the top of the underdrain and the top of Media Layer 2, must be 7 inches.

8. Compliance with subparagraph 62-6.009(7)(b)8.-14., F.A.C., is required.

9. The department will not require sampling. Sampling may be required by the professional engineer, municipality or other state agency as necessary to comply with applicable regulatory requirements.

10. The lowest point of the liner or media layer must be no less than 6 inches above the wet-season water table. There must be at least 6 inches of unsaturated slightly limited soil between the bottom of the liner and the wet-season water table.

11. Where the system has a total required drainfield size over 1,500' square feet, the design engineer must address the potential for mounding of the effluent between the drainfield and the liner at the estimated sewage flow and will increase the separation between the drainfield and Media Layer 2 to ensure Media Layer 1 maintains no less than 18" inches of unsaturated soil beneath the drainfield. A four-inch diameter observation port must be installed in the center of the liner to allow the liquid level of effluent contained within the bottom of the media liner to be monitored. The observation port must be capped and lockable and installed within a protective surface cover. A toilet flange must be securely attached to the bottom of the observation port to prevent the port from being inadvertently raised from its installed position. The observation port, including the flange, must be perforated at the lowest elevation possible to allow accurate measurements. If installed within three feet of the sidewall of a bed or trench, the port must be grouted to prevent effluent from flowing down the outer surface of the port to the media.

12. The professional engineer may specify methods to replenish media and remove spent media if the continued presence of such spent media reduces the efficacy of the process and the methods do not compromise the efficacy of the system.

13. Setback distances to the liner, or Media Layers 1 and 2 extending to the absorption surface of the drainfield will be reduced as follows:

a. Except for building foundations, vertical obstructions, and pilings for elevated structures, where the required setback is ≤ 5 feet, the setback will be reduced to one foot.

b. Where the required setback is ≥ 10 feet, the setback will be reduced by five feet.

c. Setbacks to all other parts of the system will comply with the requirements in this chapter and Section 381.0065, F.S.

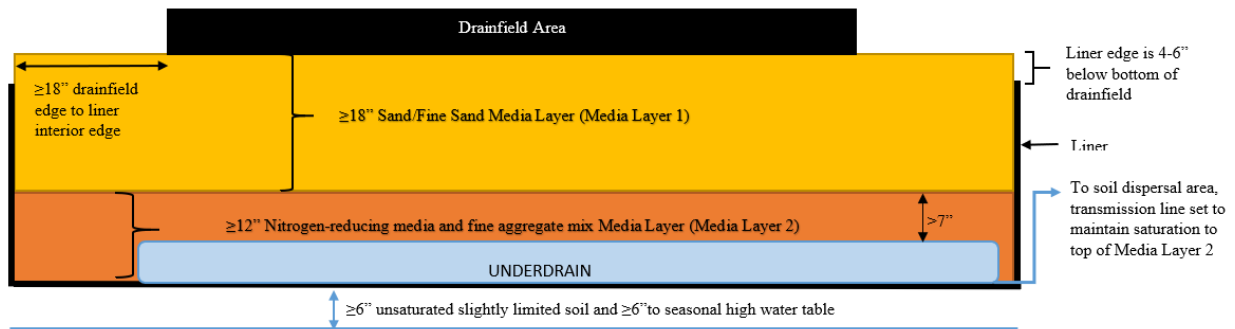


Figure 3 – INRB with liner and underdrain

(e) Prior to covering Media Layer 2, in addition to the inspections required in Rule 62-6.003, F.A.C., upon completion of the installation of Media Layer 2, a person installing or constructing the system must notify the Department that Media Layer 2 has been installed and must have that portion of the system inspected by the Department. If the inspection of Media Layer 2 is the initial inspection of the system, the initial inspection fee in paragraph 62-6.030(1)(i), F.A.C., must be paid. If an initial inspection occurred before the Media Layer 2 inspection, the reinspection fee in paragraph 62-6.030(1)(j), F.A.C., must be paid.

(f) Repairs of systems incorporating media layers must meet the current standard for nitrogen reduction. The provisions of subsection 62-6.003(3), F.A.C., do not apply to repair of systems that include media layers, nor will repairs be allowed per subsection 62-6.015(3), F.A.C.

(g) Final installation approval must not be granted until the Department has confirmed that the property owner has executed and recorded in the public property records at the county courthouse, a written notice that informs all subsequent property owners of the use of the nitrogen-reducing media onsite system that may require special repair or maintenance procedures. The notice must include the Department's construction permit number for the system, and that additional information may be obtained by contacting the Department.

(8) Alternative system component and design approval – After innovative system testing is completed, requests for approval of system components and designs which are not specifically addressed in this chapter shall be submitted to the Department's Onsite

Sewage Program.

(a) Requests for alternative system component material and design approval shall include:

1. Detailed system design and construction plans by an engineer licensed in the State of Florida,
2. Certification of the performance capabilities of the product submitted by an engineer licensed in the State of Florida,
3. Research supporting the proposed system materials,
4. Empirical data showing results of innovative system testing in the State of Florida; and,
5. A design, installation and maintenance manual showing how to design and install the system in accordance with this chapter for standard, filled, mounded, gravity-fed, dosed, bed and trench configurations.

(b) In addition to those items listed in paragraph 62-6.009(7)(a), F.A.C., manufacturers of drip effluent disposal system distribution lines, emitters, and components shall apply for and obtain approval from the Department's Onsite Sewage Program for specific model numbers or part numbers prior to inclusion of the components on any site specific permit application. Manufacturer's of drip effluent disposal system components shall provide design and installation manuals for engineering and construction guidance. Design manuals shall include tables that detail flow rates vs. pressure and pressure loss per length(s) of distribution pipe.

(c) The detailed plans and information submitted with the approval request shall be reviewed by the Department's Onsite Sewage Program to determine whether or not there is a reasonable certainty of the effectiveness and reliability of the proposed alternative system component. If the Department is not satisfied that the information provided provides reasonable evidence of the effectiveness and reliability of the alternative system component and designs, the Department shall deny the approval. Department approval of any alternative system component does not guarantee or imply that any individual system installation will perform satisfactorily for a specific period of time. Upon Department approval of the material and design, the manufacturer shall list the Department approval date in the installation and design manual. Proposals to amend the approved installation and design manual shall be submitted to the Department for approval. The date of amendment approval shall be included in the manual.

(d) Except as provided for in Part IV of this chapter, alternative drainfield materials and designs shall not be approved which would result in a reduction in drainfield size using the mineral aggregate drainfield system as described in Rule 62-6.014, F.A.C., and the total surface area of soil at the bottom of the drainfield as the criteria for drainfield sizing comparisons. Alternative system component and design approvals shall not be granted for the following items:

1. Those which, in whole or in part, are used to achieve a more advanced level of treatment than the baseline treatment level specified in Part IV of this chapter,
2. Aerobic treatment units,
3. Septic tank designs, filters, seals, and sealants,
4. Additives,
5. Header and drainfield pipe, including their layout; and,
6. Water table separation and setback requirements.

(e) Unless determined unnecessary or impractical by the Department at the time of component approval, effective January 1, 2010, all components shall be labeled with the name of the manufacturer and the model identification of the component. The design, installation and maintenance manual shall show the location of the label and shall include an illustration of a typical label. The label shall be in a location where it will be visible or easily exposed at the time of system inspection. All identifying marks shall be inscribed or affixed at the point of manufacture.

(9) Other alternative systems – systems such as low pressure distribution networks, small diameter gravity sewers, low pressure sewer systems, alternating absorption fields, and sand filters designed and submitted by an engineer who is licensed in the State of Florida, meeting the general requirements of this chapter, shall be approved by the Department where evidence exists that use of such systems will not create sanitary nuisance conditions, health hazards or pollute receiving waters. Use of an alternative system may require the establishment of procedures for routine maintenance, operational surveillance, and environmental monitoring to assure the system continues to function properly.

(10) Use of a system to serve more than one residence or commercial building under separate ownership and when located on separate lots shall require the establishment of a local sewer district, maintenance franchise, or other legally binding arrangement for the operation and maintenance of such system.

(11) All materials incorporated herein may be obtained from the Department of Environmental Protection, Onsite Sewage Program at www.floridadep.gov or 2600 Blair Stone Road, MS #3596, Tallahassee, Florida 32399-2400 or Florida Department of State, Florida Administrative Code and Register, R.A. Gray Building, 500 South Bronough Street, Tallahassee, Florida 32399-0250.

Reference materials deemed copyright protected are available for inspection at the same address.

Rulemaking Authority 381.0065(3)(a), 381.0065(4)(e) FS. Law Implemented 381.0065 FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.49, Amended 3-17-92, 1-3-95, Formerly 10D-6.049, Amended 11-19-97, 2-3-98, 3-22-00, 4-21-02, 6-18-03, 11-26-06, 6-25-09, 7-31-18, Formerly 64E-6.009, Amended 6-21-22.

62-6.010 Septage and Food Establishment Sludge.

(1) No septic tank, grease interceptor, privy, or other tank associated with an onsite sewage treatment and disposal system can be cleaned or have its contents removed until the service person has obtained an annual operating permit from the Department in the county in which the service company is located. Permits issued under this section authorize the disposal service to handle liquid waste associated with food operations, domestic waste, or domestic septage. Such authorization applies to all septage produced in the State of Florida, and food establishment sludge which is collected for disposal from onsite sewage treatment and disposal systems.

(2) Application for a service permit must be made to the Department on Form DEP 4012, effective date 06-21-2022, “Application for Septage Disposal Service Permit, Temporary System Service Permit, Septic Tank Manufacturing Approval” herein incorporated by reference at <https://www.flrules.org/Gateway/reference.asp?No=Ref-14364>. Any change to the permit conditions requires a permit amendment using form DEP 4012. Permit amendments do not alter the permit issue or expiration date. Copies of this document are available as provided in subsection (10) below. The following must be provided for the evaluation prior to issuance of a service permit:

(a) Evidence that the applicant possesses adequate equipment such as a tank truck with a liquid capacity of at least 1,500 gallons, pumps, as well as other appurtenances and tools necessary to perform the work intended. Equipment may be placed into service only after it has been inspected and approved by the Department. Tanks used for the storage of septage and food service sludges must be constructed, sized, and operated in accordance with the following provisions:

1. Septage storage tanks must be constructed of concrete, fiberglass, corrosion-resistant steel, polyethylene, or polypropylene. Tanks must be watertight and must be water tested during the inspection by the Department for leaks prior to placing into service. Storage tanks installed after the effective date of this rule must meet the setback requirements of paragraph 62-6.0101(7)(a), F.A.C.

2. Construction of concrete tanks must be at a minimum equal to that required of concrete septic tanks in Rule 62-6.013, F.A.C. Fiberglass tanks and tanks of similar materials must be constructed in accordance with standards found in Rule 62-6.013, F.A.C.

(b) The proposed disposal method and the site to be used for disposing of onsite sewage treatment and disposal system septage.

(c) The contractor registration number and certificate of authorization number, if applicable.

(3) When a permit is issued, the number of said permit along with the name of the company, its phone number, and the gallon capacity of the waste storage tank shall be prominently and permanently displayed on the service truck in contrasting colors with 3 inch or larger letters. Use of removable magnetic signs shall not be considered permanent display of vehicle identification information. A septage disposal service permit shall be suspended, revoked or denied by the Department in accordance with Chapter 120, F.S., for failure to comply with requirements of this chapter.

(4) After septage or food establishment sludge is removed from an onsite sewage treatment and disposal system, the original lid of the tank shall be put back in place, or be replaced with a new lid if the original lid is broken. The tank lid shall be completely sealed and secured as per paragraph 62-6.013(2)(i), F.A.C., and the ground backfilled and compacted so that the site is left in a nuisance free condition.

(a) Contents of any treatment tank, including all chambers of a multi-chambered tank, or pump tank shall be removed in their entirety when pumped. Where in the opinion of the person pumping any onsite sewage treatment and disposal system waste receptacle or pump tank, the complete removal of all tank contents may create an unintended problem in regards to the continued use of the system, a complete pumpout is not required. The pumper must document, in writing, to the system owner the reason for the partial pumpout, the gallonage pumped from the system, and what material was left in the tank.

(b) The access to pump a tank must be through the lid of the tank, through the manhole or by moving a sectional lid. Where the tank is chambered, separate chambers must be accessed through the manholes or sectional lid for the chamber being pumped. Pumping shall not be accomplished by entering the tank through inlets or outlets. Where the lid of the tank must be broken in order to gain access for the removal of tank contents, or at anytime when the lid is broken, the lid shall be replaced.

(5) Untreated food establishment sludges, and septage shall be transported to an approved treatment facility in such a manner as to preclude leakage, spillage or the creation of a sanitary nuisance.

(6) Septage and sludges must be transported in such a manner to preclude leakage, spillage or the creation of a sanitary nuisance.

(7) The food establishment sludge and contents from onsite waste disposal systems must be disposed of at a site and by a disposal method approved by the Department. Untreated domestic septage or food establishment sludges must not be applied to the land.

(a) Land application of domestic septage and sludges is not permitted under this chapter.

(b) All septage and food establishment sludge haulers regulated by Chapter 62-6, F.A.C., are to maintain a collection and hauling log at the main business location which provides the information listed below. Records must be retained for five (5) years.

1. Date of septage or waste collection,
2. Address of collection,
3. Indicate whether the point of collection is a residence or business and if a business, the type of business,
4. Estimated volume, in gallons, of septage or waste transported,
5. Location of the approved treatment facility,
6. Date and time of discharge to the treatment facility; and,
7. Acknowledgement from treatment facility of receipt of septage or waste.

(c) Septage which contains toxic or hazardous waste must be disposed of in accordance with the rules of the Department.

(d) Food establishment sludges may be discharged into permitted domestic wastewater treatment facilities pursuant to the requirements of Chapter 62-600, F.A.C.

(8) Septage and food establishment sludge storage tanks may be located at sites owned or leased by the disposal service. Where leased, a copy of the complete lease agreement must be provided as part of the application. The lease must provide for the final disposition of all tanks and designate the party to be held responsible for final disposition of any tank on a leased facility. Whenever locations or tanks are modified, added, or removed, the applicant must amend their service permit application using Form DEP 4012 and provide all current information to the Department prior to any changes being made. All changes must be noted on an amended permit and will not alter the issue date of the permit. All alterations must be inspected by the Department at the time of installation as well as after removal of any tank.

(9) Potable water supplies located at septage and food establishment sludge storage tank site must be provided with back flow prevention devices to prevent potential contamination of water supplies.

(10) All materials incorporated herein may be obtained from the Department of Environmental Protection, Onsite Sewage Program at www.floridadep.gov or 2600 Blair Stone Road, MS #3596, Tallahassee, Florida 32399-2400.

Rulemaking Authority 381.0065(3)(a), 381.0065(4)(e), 489.553(3) FS. Law Implemented 381.0065, 386.041, 373.4595 FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.52, Amended 3-17-92, 1-3-95, 5-14-96, Formerly 10D-6.052, Amended 3-22-00, 5-24-04, 11-26-06, 6-25-09, 4-28-10, 7-16-13, Formerly 64E-6.010, Amended 6-21-22.

62-6.0101 Portable Restrooms and Portable or Stationary Holding Tanks.

(1) Persons servicing portable restrooms, portable hand washing facilities and portable or stationary holding tanks shall obtain an annual permit on Form DEP 4013 from the Department for the county in which the service company has an office or storage yard. The service company need not be permitted in neighboring counties in which the service company operates but does not have an office or storage yard. Service persons shall carry proof of possession of a current annual operating permit and vehicle inspection for review by Department personnel in neighboring counties. Permits issued under this rule authorize the disposal service to handle liquid waste associated with portable restrooms, portable hand washing facilities, restroom trailers, shower trailers and portable or stationary holding tanks containing domestic wastewater produced in the State of Florida.

(2) Application for a service permit must be made to the Department on Form DEP 4012, effective date 06-21-2022, “Application for Septage Disposal Service Permit, Temporary System Service Permit, Septic Tank Manufacturing Approval”, adopted and incorporated by reference in subsection 62-6.010(2), F.A.C., at <https://www.flrules.org/Gateway/reference.asp?No=Ref-14364> and is available as provided in subsection (8) below. Any change to the permit conditions will require a permit amendment using Form DEP 4012. Adding storage tanks to hold the liquid waste associated with portable restrooms, portable hand washing facilities, restroom trailers, shower trailers and portable or stationary holding tanks containing domestic wastewater may be located at sites owned or leased by the service. The tanks must comply with the construction standards found in paragraph 62-6.010(2)(a), F.A.C. Where leased, a copy of the complete lease agreement must be

provided as part of the application. The lease must provide for the final disposition of all tanks and designate the party to be held responsible for final disposition of any tank on a leased facility. Whenever locations or tanks are modified, added or removed, the applicant must amend their current service permit application using Form DEP 4012 and provide all current information to the department prior to any changes being made. All changes must be noted on an amended permit, which will not alter the issue or expiration date of the permit. All alterations must be inspected by the department at time of installation, as well as after removal of any tank. The following must be provided for the evaluation prior to issuance of a service permit:

(a) Evidence that the applicant possesses adequate equipment such as a tank truck, pumps, as well as other appurtenances and tools necessary to perform the work intended. Equipment may be placed into service only after it has been inspected and approved by the Department. Tanks used for the storage of portable or stationary holding tank waste and portable restroom waste must be constructed, sized, and operated in accordance with the provisions of subparagraphs 62-6.010(2)(a)1. and 2., F.A.C.

(b) The proposed disposal method and the site to be used for disposing of the waste from portable restrooms or portable or stationary holding tanks.

(c) The contractor registration number and certificate of authorization number, if applicable.

(3) When a permit is issued, the number of said permit along with the name of the company, its phone number, and the gallon capacity of the waste storage tank shall be prominently and permanently displayed on the service truck in contrasting colors with 3 inch or larger letters. Use of removable magnetic signs shall not be considered permanent display of vehicle identification information.

(4) After waste is removed from a portable or stationary holding tank, the original cap or lid of the tank shall be put back in place, or be replaced with a new cap or lid if the original one is broken. Tank lids shall be completely sealed and secured as per paragraph 62-6.013(2)(i), F.A.C. The site shall be left in a nuisance-free condition.

(5) Waste from portable or stationary holding tanks or portable restrooms shall be transported to an approved treatment facility in such a manner as to preclude leakage, spillage or the creation of a sanitary nuisance.

(6) All portable restroom and portable or stationary holding tank waste haulers regulated by Chapter 62-6, F.A.C., are to maintain a collection and hauling log at the main business location which provides the information listed below. Records must be retained for five (5) years.

(a) Date of septage or waste collection;

(b) Estimated volume, in gallons, of waste transported;

(c) Location of the approved treatment facility;

(d) Date and time of discharge to the treatment facility;

(e) Acknowledgement from treatment facility of receipt of waste; and,

(f) The location and the installation or placement date of all portable holding tanks placed into service. When the Department requests to see the list of holding tank installation locations, only those locations within the Department's jurisdiction need to be provided.

(7) Portable Restrooms, Portable Holding Tanks, Stationary Holding Tanks, Mobile Restroom Trailers, Mobile Shower Trailers, and Portable Sinks.

(a) The Department shall allow, on a temporary basis, portable restrooms, mobile restrooms, mobile shower trailers, and portable or stationary holding tanks for fairs, carnivals, revivals, field locations, encampments and other locations which lack permanent structures where people congregate for short periods of time, provided the construction, maintenance, and utilization of such systems conform to the general provisions of this chapter. Portable restrooms, portable or stationary holding tanks or other restroom facilities shall be provided at commercial and residential building sites for the duration of construction any time workers are present, and shall not be bound by the definition of temporary. All required restroom facilities shall remain accessible whenever the intended users are present. Where the Department determines that no health hazard will result, portable restrooms, portable holding tanks, stationary holding tanks, mobile restroom trailers, mobile shower trailers, and portable sinks shall be permitted meeting setbacks that are 50% of the setback requirements of subsections 62-6.005(1) through (3), F.A.C., provided portable or stationary holding tanks shall be placed within secondary containment structures with a containment capacity of no less than 110% of the total waste capacity of the holding tank. For purposes of this rule, a holding tank is any sealed, water tight fixture for receiving and storing domestic wastewater from plumbing fixtures in remote locations or at building sites or special events. For purposes of this rule, a portable restroom is a transportable, self contained static or flush-type toilet constructed to promote a sanitary environment at remote locations, building sites or special events, comprised of at least a waste storage receptacle, a riser and toilet

seat and a protective enclosure. Portable restrooms, mobile restrooms, and mobile shower trailers at building sites or at a location for a temporary period of time do not require a permit from the Department but must comply with the provisions of this rule. A construction permit (DEP 4016) shall be obtained before placing or installing any stationary holding tanks.

(b) The Department shall approve, for permanent use or placement, portable restrooms or stationary holding tanks at continually used locations where restroom facilities are desirable for the promotion of public health and where conventional facilities are neither available nor practical. Examples of such locations would be boat ramps, remote areas of golf courses, office or sales trailers, or other places where people congregate which meet the above criteria. A construction permit (DEP 4016) shall be obtained before placing or installing any portable restroom or stationary holding tank for permanent use. The portable restroom service company providing portable restrooms or stationary holding tanks shall be responsible for maintenance of the unit and removal if conventional facilities are made available.

(c) Portable restrooms shall be self-contained, have self closing doors and shall be designed and maintained so that insects are excluded from the waste container.

(d) Portable restroom service company operators shall use Table PR I to determine the required number of facilities for special events for use in situations where no local or state codes provide a minimum number of toilet facilities. Table PR I assumes that the portable restrooms are serviced only once per day. If the restrooms are serviced twice per day, the value from the table shall be divided by two. If they are pumped three or more times per day, the value shall be divided by three. All resulting fractional numbers of restrooms required shall be rounded up to the next higher whole number of restrooms. If permanent restroom facilities are available for use by the attendees, the number of portable restrooms may be reduced based on the number of attendees the permanent facilities are designed to accommodate. At least one working day prior to the special event, special event organizers shall provide to the Department a signed contract, or facsimile copy thereof, with the portable restroom service company specifying the dates the facilities will be on the event site, the number of restroom facilities to be provided, the servicing frequency and the removal date for the units.

(e) Table PR II shall be used to determine the number of required facilities at remote locations and commercial and residential building sites.

1. Table PR II assumes that the portable restrooms are serviced only once per week. If the restrooms are serviced twice per week, the value from the table shall be divided by two. If they are pumped three or more times per week, the value shall be divided by three. All resulting fractional numbers of restrooms required shall be rounded up to the next higher whole number of restrooms.

2. Where a contractor has multiple building sites, the individual sites shall be considered a single site for purpose of determining the number of facilities. Portable restrooms serving multiple individual building sites may be shared between sites provided they are no more than 300 feet from any individual building site served.

(f) Waste receptacles shall be watertight and made of non-absorbent, acid resistant, corrosion-resistant and easily cleanable material.

(g) The floors and interior walls shall have a non-absorbent finish and be easily cleanable.

(h) Portable restrooms shall be serviced at least weekly and the inside of the structure housing the storage compartment shall be cleaned on each service visit. The waste storage compartment shall be charged with a sanitizer-deodorizer solution prepared in accordance with the sanitizer-deodorizer manufacturer's instructions.

(i) Each portable restroom shall have listed in a conspicuous place the name and telephone number of the servicing company.

(j) Portable restrooms shall be maintained in a sanitary condition. Portable restrooms at special events shall be serviced at least daily.

TABLE PR I										
NUMBER OF PORTABLE RESTROOMS REQUIRED FOR SPECIAL EVENTS (ASSUMES SERVICING ONCE PER DAY)										
NUMBER OF PEOPLE PER DAY	NUMBER OF HOURS FOR EVENT PER DAY									
	1	2	3	4	5	6	7	8	9	10
250	2	2	2	2	2	3	3	3	3	3
500	2	3	4	4	4	4	4	4	4	4

1,000	4	5	6	7	7	8	8	8	8	8
2,000	6	10	12	13	14	14	14	15	15	15
3,000	9	14	17	19	20	21	21	21	21	22
4,000	12	19	23	25	28	28	28	30	30	30
5,000	15	23	30	32	34	36	36	36	36	36
6,000	17	28	34	38	40	42	42	42	44	44
7,000	20	32	40	44	46	48	50	50	50	50
8,000	23	38	46	50	54	57	57	58	58	58
9,000	26	42	52	56	60	62	62	62	64	64
10,000	30	46	57	63	66	70	70	72	72	72
12,500	36	58	72	80	84	88	88	88	88	92
15,000	44	70	84	96	100	105	105	110	110	110
17,500	50	80	100	110	115	120	125	125	126	126
20,000	57	92	115	125	132	138	138	144	144	150
25,000	72	115	144	154	168	175	175	176	176	184
30,000	88	138	168	192	200	208	208	216	216	216

TABLE PR II	
PORTABLE RESTROOMS REQUIRED FOR REMOTE LOCATIONS AND COMMERCIAL AND RESIDENTIAL BUILDING SITES	
PER SITE OR LOCATION (ASSUMES SERVICING ONCE PER WEEK)	
NUMBER OF PEOPLE PER SITE 8 HOURS PER DAY – 40 HOURS PER WEEK	NUMBER OF RESTROOMS REQUIRED
1-10	1
11-20	2
21-30	3
31-40	4
41-50	5
over 50	Add 1 restroom for every 10 additional people or fraction thereof

TABLE PR III	
HOLDING TANK CAPACITY REQUIRED FOR REMOTE LOCATIONS, AND SPECIAL EVENTS PER SITE OR LOCATION (ASSUMES SERVICING TWICE PER WEEK)	
NUMBER OF PEOPLE PER SITE 8 HOURS PER DAY – 40 HOURS PER WEEK	MINIMUM HOLDING TANK CAPACITY (IN GALLONS)
1	125
2-3	250
4-5	500
6-7	750
over 7	Add 125 gallons for each additional person

(k) Portable hand washing facilities shall be self-contained and have access to a fresh water compartment and a wastewater compartment. A sign shall be posted near the hand washing apparatus to advise users that the water is not for drinking.

(l) Portable hand washing facilities shall be provided in a proportion of one hand wash facility to every ten portable restrooms required, and shall be provided at special events and remote locations where food is served or picnic areas are provided. With the

exception of locations where food is served, hand sanitizers may be used in lieu of hand washing facilities, at the option of the applicant.

(m) The number and location of portable restroom and hand washing facilities for food handlers at special events shall be based on this section or applicable local or state food hygiene requirements, whichever is greater.

(n) An applicant for a stationary holding tank installation permit shall provide to the Department a copy of a contract with a permitted disposal company that states the holding tank capacity and the scheduled pumping frequency.

(o) All stationary holding tanks shall be constructed in compliance with the construction standards for treatment receptacles in Rule 62-6.013, F.A.C.

(p) Portable holding tanks must meet the following requirements:

1. The total effective capacity of the portable holding tank must not exceed 300 gallons,
2. No portion of the portable holding tank must be more than 12" inches below the surface of the ground,
3. The portable holding tank must be used for a construction site or temporary use,
4. The portable holding tank must be rigid, water-tight, impervious,
5. Polyethylene holding tanks must meet the requirements of International Association of Plumbing and Mechanical Officials (IAPMO)/American National Standards Institute (ANSI) Z1000-2019 Paragraph 7.1 "Blow Molded and Single-Layer Rotationally-Molded Polyethylene Septic Tanks" and 7.2 "Multi-Layer Rotationally-Molded Polyethylene Septic Tanks" herein adopted and incorporated by reference. This standard has been deemed copyright protected and is available from the publisher at IAPMO, 4755 East Philadelphia Street, Ontario, California 91761, or at publisher's website at www.iapmo.org/, and is available for inspection as provided in subsection (8) below. Where the requirements of IAPMO/American National Standards Institute (ANSI) Z1000-2019, Paragraphs 7.1 and 7.2 conflict with the standards in this section, the standards in this section must apply,

6. Multiple portable holding tanks, if used, shall be connected in such a manner that leakage from one tank will not result in the loss of any liquid from any other tanks,

7. Each portable holding tank shall have listed in a conspicuous place the name and telephone number of the servicing company; and,

8. The portable holding tank shall be removed from the site when no longer needed,

9. The portable holding tank servicing company shall maintain a list of the location and the installation or placement date of all portable holding tanks placed into service. The list shall be made available to the Department upon request.

(q) Portable or stationary holding tanks shall be serviced at least weekly to prevent insanitary conditions.

(r) Table PR III shall be used to determine the required total capacity of portable or stationary holding tanks serving a remote location, construction site, or special event. The values from table PR III shall be adjusted proportionately to the number of times per week the holding tank will be emptied.

(s) Application for a service permit shall be made to the Department on Form DEP 4012, "Application for Septage Disposal Service Permit, Temporary System Service Permit, Septage Treatment and Disposal Facility, Septic Tank Manufacturing Approval." The following must be provided for the evaluation prior to issuance of a service permit:

1. The permanent location and address of the business where operations will originate and where equipment is to be stored when it is not in use.

2. The proposed disposal method and the site to be used for disposing of the waste.

(t) The following equipment, maintenance and service requirements shall be complied with:

1. Vehicles used for servicing portable restrooms shall be provided with two separate tanks or a dual compartment tank. One compartment or tank shall be used for receiving and removing wastes and the other shall be used for clean water storage and shall have adequate capacity to allow proper cleaning of each serviced unit. The waste tank on all vehicles servicing portable restrooms or portable or stationary holding tanks shall be equipped with a suction hose having a cut-off valve not more than 36" inches from the intake end.

2. Standby portable restroom and holding tank service equipment shall be available for use during breakdowns or emergencies. If equipment from another approved service is to be used for stand-by purposes, a written agreement between the services must be provided to the Department.

3. The waste storage compartment of a tank truck shall be maintained as necessary to prevent the creation of sanitary nuisance conditions.

(u) Portable or stationary holding tank, portable restroom, and portable hand sink wastes must be disposed of into a treatment facility approved or permitted for such disposal by the Department. These wastes must be disposed of at a Department approved

treatment facility. Companies which service portable or stationary holding tanks or portable restrooms which use quaternary ammonium sanitizing and deodorizing compounds are prohibited from having the wastes treated or disposed of at lime stabilization facilities.

(v) Contents of portable restrooms and portable or stationary holding tanks shall be removed in their entirety when pumped.

(w) Persons who own portable restrooms but are not a permitted service company shall maintain a service contract with a permitted service company for every portable restroom in use. The name and telephone number of the owner shall be displayed on every portable restroom in use.

(8) All materials incorporated herein may be obtained from the Department of Environmental Protection, Onsite Sewage Program at www.floridadep.gov or 2600 Blair Stone Road, MS #3596, Tallahassee, Florida 32399-2400 or Florida Department of State, Florida Administrative Code and Register, R.A. Gray Building, 500 South Bronough Street, Tallahassee, Florida 32399-0250. Reference materials deemed copyright protected are available for inspection at the same address.

Rulemaking Authority 381.0065(3)(a), 381.0065(4)(e), 489.553(3) FS. Law Implemented 381.0065, 386.041 FS. History—New 5-24-04, Amended 11-26-06, 6-25-09, 4-28-10, Formerly 64E-6.0101, Amended 6-21-22.

62-6.011 Abandonment of Systems.

(1) Whenever the use of an onsite sewage treatment and disposal system is discontinued following connection to a sanitary sewer or discontinuing the use of a septic tank and replacement with another septic tank, the system shall be abandoned within 90 days and any further use of the system for any purpose shall be prohibited. However, if the Department or its designee approves the use of the retention tank where the tank is to become an integral part of a sanitary sewer system or stormwater management system, the septic tank need not be abandoned.

(2) The following actions shall be taken, in the order listed, to abandon an onsite sewage treatment and disposal system:

(a) Property owner or agent shall apply for a permit from the Department to abandon the existing onsite sewage system and submit the required fee. Upon receiving a permit:

(b) The tank shall be pumped out by a permitted septage disposal company who shall provide a receipt or a written certification to the Department. Alternatively, if the tank is empty and dry at the commencement of the abandonment, a written statement to that effect by the septage disposal company or the contractor performing the abandonment shall be provided to the Department.

(c) The bottom of the tank shall be opened or ruptured, or the entire tank collapsed so as to prevent the tank from retaining water; and,

(d) The tank shall be filled with clean sand or other suitable material, and completely covered with soil.

(e) An inspection of the system abandonment shall be conducted by the Department or by the local utility or plumbing authority performing the system abandonment.

(3) The permitting provisions of paragraph 62-6.011(2)(a), F.A.C., are not required if a local utility or local plumbing authority performs a system abandonment program which requires the completion of those steps listed in paragraphs 62-6.011(2)(b), (c), (d), and (e), F.A.C. If the system abandonment is performed by a local utility or local plumbing authority, the local utility or local plumbing authority performing the abandonment program shall maintain a log of all inspections performed and shall forward the log to the Department on a monthly basis.

(4) A septic tank serving a single family residence may, at the owner's discretion, be converted into a cistern pursuant to the following procedures:

(a) The applicant shall obtain a system abandonment permit from the Department.

(b) The permit application shall specify the intended use of the abandoned septic tank.

(c) The activities related to abandoning the onsite sewage treatment and disposal system shall not create a sanitary nuisance.

(d) The septic tank shall be disconnected from the drainfield and from the building sewer pipe.

(e) All work to disconnect, clean and sanitize the septic tank shall be conducted by a registered septic tank contractor or a state-licensed plumber or by the owner of the owner-occupied single family residence being served by the septic tank.

(f) All septage, wash water, and other liquids removed from the tank shall be removed and handled as septage (Rule 62-6.010, F.A.C.) by a licensed septage disposal service and disposed of at a DEP-regulated wastewater treatment facility.

(g) The Department shall inspect the tank once it is disconnected, emptied, cleaned, disinfected and filled with water. The inspection shall determine whether all of the following conditions have been met:

1. The tank has been disconnected from the drainfield and the building sewer.

2. The tank is full of water within 12 inches of the top of the tank.
3. The clarity of the water is such that a Secchi disk is visible at the bottom of the tank.
4. The pH of the water in the tank is between 6.0 and 8.0.
5. The free chlorine residual of the water in the tank is ≤ 1.0 ppm.
6. The total coliform count is ≤ 1000 per 100 ml.
7. The fecal coliform count is ≤ 200 per 100 ml.
8. No sanitary nuisance condition exists on the property related to the abandonment activities.

(h) One inspection is included in the abandonment permit fee. The applicant shall pay a reinspection fee for any additional inspection visits necessary until all of the criteria in subparagraphs 62-6.011(4)(g)1. through 8., F.A.C., are met and final approval of the abandonment is granted by the Department.

(i) The applicant shall be responsible for all required laboratory fees. All sampling shall be conducted by Department staff during the final inspection.

(j) The septic tank shall be converted and inspected within 90 days after connection of the building plumbing to the sanitary sewer.

(k) The tank shall not be connected to any irrigation components nor shall the water used for irrigation purposes until final approval of the abandonment has been granted by the Department.

(l) Upon final approval of the abandonment, use of the tank or the drainfield for sewage storage, treatment or disposal is prohibited and constitutes a nuisance injurious to health as defined by Section 386.041, F.S.

(m) Upon final approval of the abandonment, the water collected in the tank shall be utilized for non-potable, irrigation purposes only.

Rulemaking Authority 381.0065 FS. Law Implemented 381.0065, 381.0066, 386.002, 386.003, 386.041 FS. History--New 12-22-82, Amended 2-5-85, Formerly 10D-6.53, Amended 3-17-92, 1-3-95, Formerly 10D-6.053, Amended 6-18-03, 6-25-09, 7-16-13, Formerly 64E-6.011.

62-6.012 Standards for the Construction, Operation, and Maintenance of Aerobic Treatment Units.

When aerobic treatment units are used for treating domestic and commercial sewage waste, each unit must be installed, operated and maintained in conformance with the following provisions:

(1) Aerobic treatment units designed to treat up to 1,500 gallons of sewage waste per day must be listed by a third party certifying program approved by the Department. Aerobic treatment units must be in compliance with at least one of the following standards: Class I systems as defined by NSF International Standard/American National Standard (NSF/ANSI) 40-2020, "Residential Wastewater Treatment Systems" (November 2020); nitrogen reduction as defined by NSF/ANSI 245-2020, "Wastewater Treatment Systems – Nitrogen Reduction" (November 2020); or onsite residential and commercial water reuse treatment systems as defined by NSF/ANSI 350-2020, "Onsite Residential and Commercial Water Reuse Treatment Systems" (April 2020). These NSF/ANSI standards are hereby adopted and incorporated by reference, have been deemed copyright protected, and are available for inspection as provided in subsection (6) below. An approved third party certifying program must comply with the following provisions in order for units which it has certified to be approved for use in Florida:

(a) Be accredited by the American National Standards Institute.

(b) Have established procedures which send representatives to distributors in Florida on a recurring basis to conduct evaluations to assure that distributors of certified aerobic units are providing proper maintenance, have sufficient replacement parts available, and are maintaining service records.

(c) Notify the Department of the results of monitoring visits to manufacturers and distributors annually, within 60 days of the conclusion of the calendar year. Approved distributors must be reported by the manufacturer to the certifying agency.

(d) Submit completion reports on testing for review by the Department.

(e) Provide a registered certification mark or seal which must be affixed in a conspicuous location on the units it has certified. This mark or seal will alert persons evaluating or maintaining the unit that the unit is in compliance with the NSF/ANSI standard appropriate for the application.

(2) The following additional requirements must also apply to the construction, design, and operation of aerobic treatment units treating up to 1,500 gallons per day:

(a) An appropriate mechanism must be provided to make access ports vandal, tamper, and child resistant as specified by the manufacturer and accepted by the certifying program.

(b) A minimum of a 4-inch diameter sampling access port located between the treatment unit outlet and the drainfield.

(c) A visual and audio warning device must be installed in a conspicuous location so that activation of such warning device will alert property occupants of aerobic unit malfunction or failure. The visual and auditory signals must continue to be functional in the event of an electrical, mechanical, or hydraulic malfunction of the system provided power is available to the system and must resume once power is restarted following the power outage. This does not mandate a battery back-up for the alarm system. If installed outside, the alarm must be waterproof.

(d) Each unit must be designed or equipped so that regardless of unusual patterns or frequencies of sewage flow into the system effluent discharged to the drainfield will be in compliance with the applicable standards of subsection (1), above.

(e) Minimum required treatment capacities for systems serving any structure, building or group of buildings must be based on estimated daily sewage flows as determined from Table IV.

TABLE IV AEROBIC SYSTEMS PLANT SIZING		
RESIDENTIAL:		
Number of Bedrooms	Building Area in square feet	Minimum Required Treatment Capacity Gallons Per Day
1 or 2	Up to 1200	400
3	1201-2250	400
4	2251-3300	500

NON-RESIDENTIAL:	
Estimated Sewage Flow in Gallons Per Day	Minimum Required Treatment Capacity in Gallons Per Day
0-400	400
401-500	500
501-600	600
601-700	700
701-750	750
751-800	800
801-1,000	1,000
1,001-1,200	1,200
1,201-1,500	1,500

Footnotes to Table IV

1. Where the number of bedrooms and the corresponding building area in Table IV do not coincide, the criteria which results in the greatest required treatment capacity must apply. For each additional bedroom or each additional 750' square feet of building area, or fraction thereof in a dwelling unit, treatment capacity must be increased by 60 gallons. For aerobic treatment units treating sewage from more than one dwelling unit or from residential establishments sized as other per occupant or those exceeding 2 occupants per bedroom, the minimum required treatment capacity must be 100 gallons greater than the combined estimated sewage flow from Table I.

2. These figures assume that the aerobic system will be treating domestic strength sewage with CBOD₅ and suspended solids values typically not exceeding 300 and 200 milligrams per liter, respectively. For wastewaters with higher CBOD₅, higher suspended solids values, or for facilities that exhibit short-term hydraulic surge conditions, additional treatment or pre-treatment facilities are required when specified by design engineers, plant manufacturers, or by the Department.

(f) There must be no bypass capability designed into the system which will allow waste to be discharged to the drainfield without undergoing all the treatment processes necessary to achieve the desired effluent quality. Bypassing, removing, or excluding any component or components of a system after the system has received final installation approval is prohibited.

(g) Effluent from an aerobic treatment unit must be disposed of on the owner's property in conformance with other requirements

of this chapter.

(h) Where slightly limited soil textures exist on a site, the required drainfield size may be reduced by 25 percent from the requirements in subsection 62-6.008(5), or paragraph 62-6.009(3)(d), F.A.C. This must apply to all aerobic treatment units permitted under Rule 62-6.012, F.A.C.

(i) To apply for approval of aerobic treatment unit models, a manufacturer, distributor or seller of aerobic treatment units must furnish, to the Department a written request for approval, a copy of the completion reports, owner manual, part list, and engineering drawings showing the design and construction details of all models of approved aerobic treatment units to be constructed or installed under the provisions of this rule in Portable Document Format (PDF) or other electronic format accepted by the Department. The documentation submitted must demonstrate for each unit model, the treatment unit tank in which it will be installed, and its installation and operation, complies with all provisions of this chapter. The applicant must respond to requests for additional information about their application for aerobic treatment unit approval from the Onsite Sewage Program within 60 calendar days after receipt of a request for additional information. The Department will forward these reports and drawings to Division and District offices. No aerobic unit will receive final installation approval until the unit is found to be in compliance with all provisions of this rule, including compliance with design and construction details shown on the engineering plans filed with the Department.

(j) Manufacturers must provide to the Onsite Sewage Program a listing of approved maintenance entities they have authorized to provide service in the state and must demonstrate that the entire state is covered by at least one maintenance entity. A system using a manufacturer's unit must not be approved in the state if the manufacturer cannot demonstrate that there are maintenance entities to service it.

(k) A manufacturer of a specific brand or model of an approved aerobic treatment unit must provide to the Department written assurance that spare mechanical and structural parts, as well as the mechanisms used to make the access ports vandal, tamper, and child resistant, are available, upon request, for purchase, to all approved maintenance entities.

(l) Where an aerobic treatment unit is used, a current, unexpired aerobic treatment unit maintenance contract between the property owner or lessee and an approved maintenance entity must be one of the required conditions of system approval.

(m) A copy of the signed maintenance agreement between the property owner or property lessee and an approved maintenance entity must be provided to the Department by the maintenance entity. The maintenance agreement must:

1. Initially be for a period of at least 2 years and subsequent maintenance agreement renewals must be for at least 1 year periods for the life of the system.

2. Provide that a maintenance entity which desires to discontinue the provision of maintenance services, notify in writing, the property owners and lessees and the Department at least 30 days prior to discontinuance of service.

3. Provide that, if a private maintenance entity discontinues business, property owners who have previously contracted with the discontinued maintenance service must, within 30 days of the service termination date, contract with an approved maintenance service and provide the Department a copy of the newly signed maintenance agreement.

4. Provide that each aerobic unit is inspected by an approved maintenance entity at least two times each year. Aerobic treatment units serving commercial establishments must be inspected four times per year. The maintenance entity must furnish to the Department a listing of all aerobic units inspected or serviced during the respective reporting period. As a minimum, reports must indicate the system owner or building lessee, the street address of the system, the date of system inspection or service and a statement as to the maintenance or service performed. The maintenance entity must also include a list of the owners who have refused to renew their maintenance agreement.

(n) The maintenance entity must furnish to the Department of Health, county health department a report of all aerobic treatment units inspected or serviced during the respective reporting period. As a minimum, reports must indicate the operating permit, system owner or building lessee, the street address of the system, the date of system inspection or service and a statement as to the maintenance or service performed. The maintenance entity must also include a list of the owners who have refused to renew their maintenance agreement.

(o) The Department must, at least annually, inspect the maintenance and performance of aerobic treatment units. The Department must also inspect each authorized maintenance entity, including review of their service records and maintenance agreements.

(3) An aerobic treatment unit used for treating domestic or commercial sewage flows in excess of 1,500 gallons per day, or a combination of aerobic treatment units treating flows according to paragraph 62-6.004(4)(a) or (b), F.A.C., must be designed and certified by an engineer licensed in the State of Florida. The design must include an assessment of wastewater strength. The

certification must state that the unit is capable of consistently meeting, at minimum, secondary treatment standards for CBOD₅ and TSS established in paragraph 62-6.025(1)(d), F.A.C., Table IXb. In addition, the following requirements must also be met:

(a) The owner or lessee of a system must comply with the applicable safety, maintenance and operational requirements of subsection (2), above. Unless the system owner or lessee is a state licensed wastewater treatment plant operator, the owner or lessee is required to have a system maintenance agreement with a permitted aerobic unit maintenance entity which has at least a Class D state certified operator who has been certified under the provisions of Chapter 62-602, F.A.C.

(b) A permitted aerobic unit maintenance entity must collect effluent quality samples and submit the sample analysis reports to the Department. Effluent quality samples for CBOD₅ and suspended solids must be collected at least semi-annually and such samples must be analyzed by a Department-approved laboratory.

(c) Written sample analysis reports must be submitted to the Department by no later than the 15th of the next month following the semi-annual sampling period. However, if the sample analysis for CBOD₅ or suspended solids exceeds secondary treatment standards by more than 100 percent, the maintenance entity or certified operator must notify the Department by telephone or in person within 24 hours after receipt of sample analysis results.

(d) The Department must monitor the maintenance and performance of aerobic treatments units as required by paragraph (m), above.

(4) No aerobic treatment unit must be serviced or repaired by a person or entity engaged in an aerobic treatment unit maintenance service until the service entity has obtained an annual written permit issued on Form DEP 4013 effective 06-21-2022, Operating Permit, adopted and incorporated by reference at <https://www.flrules.org/Gateway/reference.asp?No=Ref-14365>, from the Department in the county where the service company is located. Each service entity must employ at least one plumbing contractor licensed under Section 489.105(3)(m), F.S., septic tank contractor registered under Part III of Chapter 489, F.S., or a state-licensed wastewater treatment plant operator, who is responsible for maintenance and repair of all systems under contract. Application for a Maintenance Service Permit, Form DEP 4066, effective 06-21-2022, herein adopted and incorporated by reference at <https://www.flrules.org/Gateway/reference.asp?No=Ref-14366>, must be made to the Department. Copies of these documents are available as provided in subsection (6), below. The application must contain the following information:

(a) Evidence that the maintenance entity possesses a manufacturer's maintenance and operations manual and has received training from the manufacturer in proper installation and service of the unit and has received written approval from the manufacturer to perform service on their units. The manual must contain detailed instructions on proper operation and maintenance procedures, a replacement parts list for all models being installed and maintained, a statement giving the capabilities of each unit, instructions on how to detect a malfunctioning unit and what to expect from a properly functioning unit.

(b) A signed statement from the applicant attesting that the applicant has adequate staff, possesses proper equipment and has sufficient spare structural and mechanical parts and components to perform routine system monitoring and servicing and is able to make a service response within 36 hours after notification of the need for emergency repairs.

(c) Payment of \$25.00 to the Department per annum for the aerobic treatment unit maintenance service permit.

(5) Emergency service necessary to prevent or eliminate an imminent sanitary nuisance condition caused by failure of a mechanical component of any aerobic treatment unit must be reported by the approved aerobic unit maintenance entity, in writing, to the Department no later than 5 working days after the date of the emergency service.

(6) All materials incorporated herein may be obtained from the Department of Environmental Protection, Onsite Sewage Program at www.floridadep.gov or 2600 Blair Stone Road, MS #3596, Tallahassee, Florida 32399-2400 or Florida Department of State, Florida Administrative Code and Register, R.A. Gray Building, 500 South Bronough Street, Tallahassee, Florida 32399-0250. Reference materials deemed copyright protected are available for inspection at the same address.

Rulemaking Authority 381.0065(3)(a), 381.0065(4)(e), 489.553(3) FS. Law Implemented 381.0065, Part I 386 FS. History—New 3-17-92, Amended 1-3-95, Formerly 10D-6.0541, Amended 11-19-97, 4-21-02, 6-18-03, 5-24-04, 11-26-06, 6-25-09, 4-28-10, 7-31-18, Formerly 64E-6.012, Amended 6-21-22.

62-6.013 Construction Materials and Standards for Tanks.

(1) Onsite sewage tank design. The following requirements must apply to all onsite sewage tanks manufactured for use in Florida unless specifically exempted by other provisions of these rules:

(a) Onsite sewage tanks include: septic tanks, graywater tanks, laundry tanks, grease interceptors, pump tanks, aerobic treatment unit tanks, tanks containing treatment media and stationary holding tanks not described in paragraph 62-6.0101(7)(p), F.A.C. Tanks

must be constructed of concrete, fiberglass or polyethylene.

(b) Design and testing of concrete treatment tanks:

1. Structural design of tanks must be by calculation or by performance.

2. Structural design must be verified by actual vacuum load or hydrostatic test in accordance with the Department's policy for Test Requirements for Structural Proofing, February 28, 2022, herein adopted and incorporated by reference at <http://www.flrules.org/Gateway/reference.asp?No=Ref-14367>. Copies of this policy are available as provided in subsection (12) below. The vacuum test must be followed by a flow and water tightness test.

3. Tanks must be watertight as defined in ASTM C1227-20, Standard Specification for Precast Concrete Septic Tanks, paragraph 9.2., (2020) herein adopted and incorporated by reference. This standard has been deemed copyright protected and is available from the publisher at ASTM International, P.O. Box C700 West Conshohocken, Pennsylvania 19428-2959, or at publisher's website at www.astm.org/, and is available for inspection as provided in subsection (12) below. ASTM C1227-20, paragraph 9.2.2, must be modified to read as follows: Water tightness testing – Fill the tank with water to the invert of the outlet and let stand for 24 hours. Refill the tank. The tank is approved as water tight if the water level is held for one hour.

4. Manufacturers may use calculations provided by the design engineer in lieu of proof testing for tanks using reinforcement bars for structural strength and having a wall thickness of 5 inches or greater. Design by calculation must be completed using the Strength Design Method outlined in Chapters 4, 5 and 6 of the American Concrete Institute (ACI) publication ACI 318-19, Building Code Requirements for Structural Concrete and Commentary (2019), herein adopted and incorporated by reference. This document has been deemed copyright protected and is available from the publisher at American Concrete Institute, 38800 Country Club Drive, Farmington Hills, MI 48331-3439, or at publisher's website at www.concrete.org/, and is available for inspection as provided in subsection (12) below. For the design strength a strength reduction factor will be applied per ACI 318-19 Chapter 21.

(c) Design and testing of fiberglass and polyethylene tanks:

1. Vacuum testing must be conducted in accordance with the Department's policy for Test Requirements for Structural Proofing, February 28, 2022, adopted and incorporated by reference in subparagraph 62-6.013(1)(b)2., F.A.C. Copies of this policy are available as provided in subsection (12), below and at <http://www.flrules.org/Gateway/reference.asp?No=Ref-14367>. The vacuum test will be followed by a water-tightness test.

2. Vacuum testing must demonstrate a distortion of volume of no more than 1% at a safety factor of 1.0 and 2% at a safety value of 1.4 followed by passing a water-tightness test to be considered satisfactory. To determine the vacuum at a 1.0 safety factor, divide the required total vacuum values by 1.4. There must be no distortion of the access hatch perimeters at the full vacuum load and the access hatch must be able to be removed and reinstalled at the conclusion of the test.

3. Flow and water-tightness testing must be performed as follows: Fill the tank with water to the invert of the outlet. The tank is approved as water tight if the water level is held for one hour.

(d) Testing must be performed by or witnessed by an engineer licensed in the state of Florida, or by an employee of the Department that has been authorized to perform or witness tank testing. Test results must be certified by the witnessing engineer or Department employee.

(e) Tank lids for non-traffic residential installations must be designed for a dead load of 12" inch earth cover with a dry soil density of 100 pounds per cubic foot or a live load of two concentrated loads of 1,750 pounds at a 60" inch spacing or a concentrated load of 1,750 pounds located at the center of the lid, whichever provides the greater shear and moment stresses to the lid. The required strength must be per ACI 318-19, Chapter 5, incorporated by reference in subparagraph 62-6.013(1)(b)4., F.A.C., effective 06-21-2022. Structural integrity proof test or calculations for the 12 inch overburden earth load and the 1750 pound concentrated loading must be provided. Designs sealed by an engineer licensed in the state of Florida will be acceptable for design proof of tank lid designs.

(f) Tanks and tank lids for traffic installations must be designed, signed and sealed by an engineer licensed in the state of Florida. Whenever vehicular traffic is anticipated to cross over the tank, traffic lids must be installed with manhole covers to finished grade. Traffic tanks and lids must be designed in accordance with ASTM C 890-21, Standard Practice for Minimum Structural Design Loading for Monolithic or Sectional Precast Concrete Water and Wastewater Structures (2021), herein adopted and incorporated by reference, for the appropriate loading. This standard has been deemed copyright protected and is available from the publisher at ASTM International, P.O. Box C700 West Conshohocken, Pennsylvania 19428-2959, or at publisher's website at www.astm.org, and is available for inspection as provided in subsection (12) below. Application of paragraph 5.2.4 of ASTM C 890-21, will be at the discretion of the design engineer.

(2) Onsite sewage tank design requirements. The following details must be incorporated into the design:

(a) Septic tanks and graywater tanks must have multiple compartments, or single compartment tanks must be placed in series to achieve the required effective capacity. Grease interceptors, laundry tanks, pump tanks and aerobic treatment unit tanks must be either multi-compartment or single compartment tanks. All tank stiffening members such as ribs must be a homogeneous integral part of the structure. When slide-in type compartment walls are proposed, the structural testing for such tanks must be conducted without the slide-in wall in place. There must be a maximum of two horizontal seams between the topside of the bottom of the tank and the underside of the lid. There must be no vertical seams. Except as noted in this paragraph, the first chamber of a dual compartment septic or graywater tank or the first tank of single compartment tanks in series must have a minimum effective capacity of at least $\frac{2}{3}$ of the total required effective capacity. The second single compartment tank or chamber of a multi-compartment tank must have a minimum effective capacity of at least $\frac{1}{5}$ of the total required effective capacity. The combined effective capacities of the first and second chambers or the first and second single-compartment tanks must equal or exceed the total required effective capacity. Systems with daily flows in excess of 3,500 gallons per day may utilize two tanks to achieve the total required effective capacity, provided that the first tank provides no less than $\frac{1}{2}$ of the total required effective capacity. The second tank must provide no less than $\frac{1}{5}$ of the total required effective capacity and the total effective capacities of the two tanks combined must be no less than the total required effective capacity.

(b) The liquid depth of compartments for septic tanks and grease interceptors must be at least 40 inches. The liquid depth of compartments for graywater tanks, laundry tanks and pump tanks must be at least 30 inches. Liquid depths greater than 84 inches must not be considered in determining the effective capacity.

(c) A minimum free board or airspace of 15 percent by volume of the effective capacity of all blackwater, graywater and laundry tanks must be provided. The volume of risers above the liquid level line cast as an integral part of the tank may be included as free board or airspace.

(d) The inlet invert of septic tanks, graywater tanks and laundry tanks must enter the tank 1 to 3 inches above the liquid level of the tank. A vented inlet tee, vented sweep or a baffle may be provided at the discretion of the manufacturer to divert the incoming sewage. The inlet device, if utilized, must have a minimum diameter of 4 inches and must not extend below the liquid surface more than 33 percent of the liquid depth.

(e) In septic tanks, graywater tanks and laundry tanks, a minimum 4 inch diameter vented outlet tee, sweep or baffle must extend below the liquid level of the tank so that the invert level of the outlet device is a distance not less than 30 percent nor greater than 40 percent of the liquid depth. The outlet device must extend at least 4 inches above the liquid level. The submerged intake orifice of any outlet fixture not incorporating an approved outlet filter device must be provided with an approved solids deflection device to reduce, by a minimum of 90 percent, the intake area of the outlet fixture exposed to the vertical rise and fall of solid particles within the tank. Turning the intake orifice of an outlet tee or sweep 90 degrees from the vertical will satisfy the solids deflection device requirement.

(f) The inlet and outlet devices must be located at opposite ends of the tank so as to be separated by the maximum distance practical and must be in accordance with ASTM C-923/C-923M-20, Standard Specification for Resilient Connectors Between Reinforced Concrete Manhole Structures, Pipes, and Laterals (2020), herein adopted and incorporated by reference. This standard has been deemed copyright protected and is available from the publisher at ASTM International, P.O. Box C700 West Conshohocken, Pennsylvania 19428-2959, or at publisher's website at www.astm.org/, and is available for inspection as provided in subsection (12) below. Inlets and outlets on the sides of any tank must be located no more than 12 inches from the end of the tank.

(g) Compartment walls must be designed to withstand the stresses induced by pumping out either of the compartments. There must be no relief holes. However, the compartment walls may be inserted in grooves without grouting, fiberglassing or otherwise permanently attaching in place, unless such attachment is required for proving structural integrity of either the tank or compartment wall.

(h) Sewage flow between the first and second chamber of a multi-chamber tank must interconnect utilizing either a minimum 4 inch diameter hole or equivalent size slot in the wall or with a minimum 4 inch diameter vented and inverted U-fitting or a tee. Receptacles in series must interconnect utilizing a minimum 4 inch diameter vented, inverted U-fitting or a tee. For septic, graywater and laundry tanks, the outlet device or slot must extend below the liquid level of the tank so that the invert level is located not less than 30 percent nor greater than 40 percent of the liquid depth.

(i) Joints of tanks, including mid-seams, risers, and lids must be sealed using a bonding compound that meets ASTM C-990-09R19, Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections using Preformed Flexible Joint

Sealants (2019), herein adopted and incorporated by reference. This standard has been deemed copyright protected and is available from the publisher at ASTM International, P.O. Box C700 West Conshohocken, Pennsylvania 19428-2959, or at publisher's website at www.astm.org/, and is available for inspection as provided in subsection (12) below.

(j) The Department's designated approval number for the tank, and the effective capacity of the tank in gallons must be cast or stamped into the wall or permanently stenciled or decalced onto the wall at the inlet end, to begin within 6 inches of the top of the wall. All identifying marks must be inscribed or affixed at the point of manufacture only. All information supplied in the legend must be provided with a minimum of two inch high lettering.

(k) Each compartment must have access using manholes, with each manhole having a minimum area of 225" square inches. Manholes must be located so as to allow access to the inlet and outlet devices. A minimum 6"-inch diameter opening must be placed at the inlet and outlet ends of the lid if a minimum 225" square inch access port is placed in the middle of the lid. The access manhole over the inlet and outlet must extend to within 8" inches of finished grade. If a riser is used, and if the riser access lid opens directly to the receptacle interior, joints around the riser and receptacle must be sealed and made watertight as specified in paragraph 62-6.013(2)(i), F.A.C., to prohibit intrusion of ground water into the tank. For multi-compartment tanks or tanks in series, manholes must extend to within 8 inches of finished grade over the first compartment inlet and the last compartment outlet. An appropriate mechanism must be provided to make access manholes vandal, tamper, and child resistant. Acceptable protection of openings must consist of one or more of the following methods as specified by the manufacturer:

1. A padlock.
2. A twist lock cover requiring special tools for removal.
3. Covers weighing 58 pounds or more, net weight.
4. A hinge and hasp mechanism which uses stainless steel or other corrosion resistant fasteners to fasten the hinge and hasp to the lid and tank for fiberglass, metal or plastic lids.

(l) Tank designs that specify a monolithic compartment wall from the bottom of the tank up to the invert of the pass-through orifice and a drop-in section for the upper portion of the wall must be approved for both single and multi-compartment use.

(m) Tanks must have a one-piece lid or a lid with a maximum of three sections. All lids must be designed by Licensed Engineers in accordance with paragraphs 62-6.013(1)(e) and (f), F.A.C., and approved by the Department.

(3) Onsite sewage tank design approval. All onsite sewage tanks distributed in the state must be approved for use by the Department prior to being offered for sale or installed. Such approval must not be obtained until the manufacturer of a specific tank model has submitted the following:

- (a) Detailed design drawings of the tank and lid showing:
1. Design calculations or proof testing results in accordance with subsection 62-6.013(1), F.A.C.
 2. Dimensions, including location and size of all inlets, outlets, access hatches, manholes and pass through orifices.
 3. Effective capacity in gallons.
 4. Freeboard or air space in gallons.
 5. Production materials. For concrete tanks include 28 day compressive strength, in pounds per square inch (psi).
 6. Reinforcing materials. For concrete tanks, include size and location of all rebar, if any; and fiber reinforcing material size and quantity (in pounds) per cubic yard, if any.

(b) For concrete tanks – see subsection 62-6.013(5), F.A.C.

(c) For fiberglass and polyethylene tanks – see subsection 62-6.013(6), F.A.C.

(d) Certification that the tank has undergone flow testing to confirm the effective capacity, airspace, and water tightness. Flow testing must be conducted by an engineer licensed in the state of Florida or a Department employee. Test results must be certified by the engineer or Department employee.

(e) Designs must be submitted to the Department, Onsite Sewage Program.

(f) There must be two tank design classifications. The following criteria must be used for each category:

1. Category 3 tanks must be designed for saturated soil with the saturation at finished grade. The design must provide for a maximum of 18 inches of saturated soil cover over the top of the tank. Soil density must be 100 pounds per cubic foot. The lateral earth pressure coefficient (K) must be no less than 0.33.

2. Category 4 tanks must be designed for saturated soil with the saturation at finished grade. The design must provide for a maximum of 48" inches of saturated soil cover over the top of the tank. Soil density must be 100 pounds per cubic foot. The lateral earth pressure coefficient (K) must be no less than 0.33. Where a tank will be placed with greater than 48" inches of soil over the top

of the tank, an engineer licensed in the state of Florida must design the tank for the specific conditions anticipated at the site.

(g) A series of tanks may be approved by successful demonstration of the largest in a series of tanks. Approval for inclusion of the tanks to be considered in a series must be obtained from the Department prior to testing the tanks. A series is either where only one dimension, this being height, length, or width, is changed or where two dimensions change in the same proportion to offer a different capacity of tank.

(h) The manufacturer must notify the Department in writing, stipulating the date, time and location of the test, no less than ten working days prior to the tank proof testing. The notice must include the tanks to be tested. Approval must not be granted until after successfully passing the required tests, and submitting the testing results.

(i) The Department will issue an approval number to the manufacturer. Form DEP 4012, "Application for Septage Disposal Service Permit, Temporary System Service Permit, Septic Tank Manufacturing Approval," adopted and incorporated by reference in subsection 62-6.010(2), F.A.C., and available as provided in subsection (12) below, must be used to apply for manufacturing approval. The form can be obtained from the Department.

(4) Onsite sewage tank manufacturer's yearly inspection – Yearly inspection of the manufacturer's facility must consist of the following:

(a) Verify that the manufacturer has the design mix recorded and in a readily accessible location for the plant operators.

(b) Verify that the production process is recorded and that the operators are following the process.

(c) Verify that the necessary tests are being conducted by a certified testing lab or by a technician certified by the ACI. The preparation of the test specimens must be performed by certified third party testing laboratory personnel; or manufacturers, or their employees, that have successfully passed the ACI certification program. Each manufacturer must submit a minimum of three cylinders per year. The specimens must be taken from a production mix.

(d) Verify that the manufacturer has the proper number of tests for the year and that the results are recorded. Review the results for compliance with the design.

(e) Examine the material stockpiles to ensure that the materials are free from deleterious materials.

(f) Examine the measuring equipment to ensure that the equipment has been calibrated within the last year.

(g) Examine conveyors to insure that material is transported as measured.

(h) Inspect a minimum of five tanks in the manufacturers' inventory. For different series, a minimum of one tank must be inspected from each series. Report the following unacceptable defects:

1. Cracks in all interior and exterior surfaces of the tanks.

2. Cold joint lines. This is an indication of non-monolithic pours. Examine both the interior and exterior of the tank for confirmation of a cold joint that extends across the thickness of the wall.

3. Evidence of improper steel cover. Rebar and wire mesh must not be exposed.

4. Watertight inlets and outlets must be provided per rule.

(i) Where cold-joint lines that appear to extend through the wall, or cracks in any surface of the tank exist, conduct a watertightness test on a maximum of two tanks as follows: Fill the tank with water to the invert of the outlet. The tank is approved as watertight if the water level is held for one hour. For concrete tanks, if the test fails within the first 24 hours after filling, it may be repeated after 24 hours. The tanks must not be tested until they have cured for 28 days. If there are no indications of cold-joint lines that appear to extend through the wall, or cracking of tank surfaces, two tanks must be tested at random. Record all data and submit results to the Department.

(j) Verify that the manufacturer is not relocating the tanks prior to the tank achieving 75% of the design compressive strength. Record how this is accomplished.

(k) Conduct impact hammer tests-record data.

(l) Examination of the manufacturer's receipts for material used during the previous year. Tank manufacturers must retain all receipts from the previous year for material used in the manufacture of tanks and make them available for inspection.

(5) Concrete tanks must be built of precast or poured in place concrete in accordance with ACI 318-19, Building Code Requirements for Structural Concrete and Commentary incorporated by reference in subparagraph 62-6.013(1)(b)4., F.A.C., effective 06-21-2022, or ASTM C-1227-20, Standard Specification for Precast Concrete Septic Tanks, incorporated by reference in subparagraph 62-6.013(1)(b)3., F.A.C., effective 06-21-2022, except as revised herein.

(a) For design and analysis of concrete septic tanks, the publication "Rectangular Concrete Tanks" revised 5th edition (1998), as published by the Portland Cement Association may be used at the designer's discretion, herein incorporated by reference. When

computing length to height and width to height ratios the designer may interpolate between tables for intermediate ratios and values or may use the table and values for the higher ratios.

(b) Temperature and shrinkage crack control in concrete tanks must be accomplished by use of steel reinforcing in accordance with ACI 318-19 Chapter 11, incorporated by reference in subparagraph 62-6.013(1)(b)4., F.A.C., effective 06-21-2022 or by use of fiber reinforcement. Minimum ratio of vertical and horizontal reinforcement area to gross concrete area must be 0.0010 for deformed bars or welded wire fabric. Fiber reinforcing materials may be used by the manufacturer to achieve crack control equivalent to the use of deformed bars or welded wire fabric. To be considered equivalent, acceptable fibers must at least meet or exceed ACI recommendations regarding materials, fiber sizing, and required fiber quantities. Any current or future revisions to the ACI recommendations may be used by the manufacturer, at their option. Materials other than materials recognized by ACI for crack control use will not be acceptable. Minimum reinforcement must be as outlined in the document entitled Reinforcement Required to Meet paragraph 62-6.013(5)(b), F.A.C., dated February 28, 2022, herein adopted and incorporated by reference. Copies of this document are available as provided in subsection (12), below and at <http://www.flrules.org/Gateway/reference.asp?No=Ref-14805>.

(c) Concrete mixes must be in accordance with the Portland Cement Association (PCA) publication entitled PCA Design and Control of Concrete Mixtures, Seventeenth Edition (2021), herein adopted and incorporated by reference. This standard has been deemed copyright protected and is available from the publisher at the Portland Concrete Association, 5420 Old Orchard Road, Skokie Illinois 60077-1083 or at the publisher's website at www.concrete.org/, and is available for inspection as provided in subsection (12) below.

(d) Terminology relating to concrete and concrete aggregates must be in accordance with ASTM C-125-21a, Standard Terminology Relating to Concrete and Concrete Aggregates (2021), herein adopted and incorporated by reference. This standard has been deemed copyright protected and is available from the publisher at ASTM International, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959, or at publisher's website at www.astm.org/, and is available for inspection as provided in subsection (12) below.

(e) Concrete aggregates used in the manufacturing of all precast or poured-in-place concrete tanks for use in onsite sewage treatment and disposal systems must conform to ASTM C 33-/33M-18, Standard Specification for Concrete Aggregates (2018), herein adopted and incorporated by reference. This standard has been deemed copyright protected and is available from the publisher at ASTM International, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959, or at publisher's website at www.astm.org/, and is available for inspection as provided in subsection (12) below.

(f) Minimum concrete cover over structural steel reinforcing must be 3/4" inches. The minimum bend radius for structural reinforcing must be three times the reinforcing bar diameter.

(g) Temperature and shrinkage crack control steel must not be exposed. Exposure of fiber reinforcing is acceptable.

(h) Minimum 28-day compressive strength must be 4000 psi.

(i) Three compressive test cylinders must be prepared, cured, and tested in accordance with ASTM C 31/C31M-21a, Standard Practice for Making and Curing Concrete Test Specimens in the Field (2021), herein adopted and incorporated by reference, and ASTM C-39/C-39M-21, Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens (2021), herein adopted and incorporated by reference, at least one time every year, or whenever the manufacturer changes the design mix or the manufacturing process. These standards have been deemed copyright protected and are available from the publisher at ASTM International, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959, or at publisher's website at www.astm.org/, and are available for inspection as provided in subsection (12) below.

(j) The bottoms of concrete tanks must be monolithic and must either be an integral part of the walls or must be sealed to the walls using water-stops cast into the wall and bottom. Receptacle bottoms must not contain openings for any purpose, for example, to facilitate the removal of rainwater.

(k) Approval of new designs must not be granted until the following has been completed and submitted as part of the application:

1. Establish a design mix and production process. Record the aggregate material, size and gradation; type and strength of cement; cement to aggregate ratios; water to cement ratio; and any other pertinent design data. Record the production process, for example; measuring equipment, batch sizes, mixing sequence, transportation techniques from mixer to mold, pouring techniques with consolidation of concrete methods detailed.

2. Construct three tanks using the design mix.

3. Test two sets of cylinders from the design mix at 7 days and 28 days.

4. Structural proof test three tanks to the design strength in accordance with paragraph 62-6.013(1)(b), F.A.C., for tanks having an effective capacity of 1,350 gallons or less.

5. Structural proof test one tank to the design strength in accordance with paragraph 62-6.013(1)(b), F.A.C., for tanks having an effective capacity greater than 1,350 gallons but not more than 1,500 gallons.

6. Structural proof test one tank or provide tank strength calculations in accordance with paragraph 62-6.013(1)(b), F.A.C., for tanks having an effective capacity exceeding 1,500 gallons.

7. Verify that the manufacturer is not removing tanks from the producer's facility prior to the tank achieving 75% of the design compressive strength. Record how this is accomplished.

(6) The following structural requirements are applicable to fiberglass and polyethylene tanks:

(a) Materials and sealants used in the tank manufacturing process must be capable of effectively resisting the corrosive influences of the liquid components of sewage, sewage gases and soil burial. Materials used must be formulated to withstand shock, vibration, normal household chemicals, deterioration from sunlight and other environmental factors.

(b) Fiberglass tanks must be constructed so that all parts of the tank meet the following mechanical requirements. A test report from an independent testing laboratory is required to substantiate that individual tank designs and material formulations meet these requirements.

1. Ultimate tensile strength – minimum 12,000 psi when tested in accordance with ASTM D-638-14, Standard Test Method for Tensile Properties of Plastics (2014), herein adopted and incorporated by reference. This standard has been deemed copyright protected and is available from the publisher at ASTM International, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959, or at publisher's website at www.astm.org/, and is available for inspection as provided in subsection (12) below.

2. Flexural strength – minimum 19,000 psi when tested in accordance with ASTM D-790-17, Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials (2017), herein adopted and incorporated by reference. This standard has been deemed copyright protected and is available from the publisher at ASTM International, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959, or at publisher's website at www.astm.org/, and is available for inspection as provided in subsection (12) below.

3. Flexural modulus of elasticity – minimum 800,000 psi when tested in accordance with ASTM D-790-17 Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials, incorporated by reference in subparagraph 62-6.013(6)(b)2., F.A.C., effective 06-21-2022.

4. Not less than 30 percent of the total weight of the fiberglass tank must be fiberglass reinforcement.

5. Internal surfaces must be coated with an appropriate gel coating or resin to provide a smooth, pore-free, watertight surface.

(c) Polyethylene tanks must meet the requirements of International Association of Plumbing and Mechanical Officials (IAPMO)/American National Standards Institute (ANSI) Z1000-2019 Paragraph 7.1 "Blow Molded and Single-Layer Rotationally-Molded Polyethylene Septic Tanks" and 7.2 "Multi-Layer Rotationally-Molded Polyethylene Septic Tanks" (2019) herein adopted and incorporated by reference. This standard has been deemed copyright protected and is available from the publisher at IAPMO, 4755 East Philadelphia Street, Ontario, California 91761, or at publisher's website at www.iapmo.org/, and is available for inspection as provided in subsection (12) below. Where the requirements of IAPMO/American National Standards Institute (ANSI) Z1000-2019, Paragraphs 7.1 and 7.2 conflict with the standards in this section, the standards in this section must apply. A test report from an independent testing laboratory is required to substantiate that individual tank designs and material formulations meet these requirements.

(d) Approval of new designs must not be granted until the following has been completed and submitted as part of the application:

1. Establish a design mix and production process. Record the material specifications and other pertinent design data. Record the production process, for example; measuring equipment, batch sizes, mixing sequence, transportation techniques from mixer to mold, and spraying techniques.

2. Construct three receptacles using the design mix.

3. Test two sets of test strips from the design mix.

4. Structural proof test three receptacles to the design strength per paragraph 62-6.013(1)(c), F.A.C., for receptacles having an effective capacity of 1,350 gallons or less.

5. Structural proof test one receptacle to the design strength in accordance with paragraph 62-6.013(1)(c), F.A.C., for receptacles having an effective capacity greater than 1,350 gallons.

6. Verify that the manufacturer is not planning to relocate the receptacles prior to the receptacle achieving 75% of the design compressive strength. Record how this is accomplished.

(7) Grease interceptors are not required for a residence. However, one or more grease interceptors are required where grease waste is produced in quantities that could otherwise cause line stoppage or hinder sewage disposal. The design of grease interceptors must be based on standards found in paragraph (a) below. In addition, the following general requirements found in paragraphs (b), (c), and (d), apply when determining the proper use and installation of a grease interceptor used as a component of an onsite sewage treatment and disposal system.

(a) The inlet invert must discharge a minimum 2 1/2" inches above the liquid level line and the outlet pipe must have a tee with a minimum diameter of 4 inches that extends to within 8" inches of the bottom of the tank.

(b) Interceptors must be located so as to provide easy access for routine inspection, cleaning and maintenance. Manholes must be provided over the inlet and outlet of each interceptor and be brought to finished grade.

(c) Where a grease interceptor is required or used, only kitchen wastewater must first pass through the interceptor and then be discharged into the first compartment of a septic tank or other approved system.

(d) Sizing of grease interceptors must be based on the equations below. The minimum volume of any grease interceptor must be 750 gallons and the maximum volume of an individual single grease interceptor chamber must be 1,250 gallons. When the required effective capacity of the grease interceptor is greater than 1,250 gallons, installation of multi-chambered grease interceptors or grease interceptors in series is required.

1. Restaurants: $(S) \times (GS) \times (HR/12) \times (LF)$ = effective capacity of grease interceptor in gallons.

S = number of seats in the dining area.

GS = gallons of wastewater per seat; use 25 gallons for ordinary restaurant, use 10 gallons for single service article restaurants.

HR = number of hours establishment is open.

LF = loading factor: use 2.0 interstate highways, 1.5 other freeways, 1.25 recreational areas, 1.0 main highways, and 0.75 other roads.

2. Other type establishments with commercial kitchens: $(M) \times (GM) \times (LF)$ = effective capacity of grease interceptor in gallons.

M = meals prepared per day.

GM = gallons of wastewater per meal: use 5 gallons.

LF = loading factor: use 1.00 with dishwashing and 0.75 without dishwashing.

(8) Laundry tank or laundry waste interceptor – when a separate system is installed to accept effluent from a single home washing machine only, the laundry tank or laundry waste interceptor for such system must meet the following minimum standards:

(a) The minimum effective capacity must be 225 gallons for establishments with an estimated sewage flow of up to 300 gallons per day and must be increased by 50 gallons for every 100 gallons of additional daily sewage flow.

(b) The laundry waste interceptor must be provided with a vented inlet tee, vented sweep, or a baffle.

(c) The laundry waste interceptor must not receive waste flow from kitchen fixtures or be used as a grease trap.

(9) Pump tanks and pumps – when used as part of an onsite sewage treatment and disposal system, the following requirements must apply to all pump tanks manufactured for use in Florida unless specifically exempted by other provisions of these rules:

(a) Pump tanks must have a minimum total capacity measured from the bottom of the tank to the top of the tank in accordance with Table II. At least 80% of the required total capacity must be contained below the invert of the inlet. Pump levels must be set as low as practical to preserve as much reserve capacity as possible in the event of pump failure.

(b) The electrical conduit and effluent dosing pipe must exit the dosing chamber:

1. Through the tank outlet using plumbing fittings and reducers to produce a watertight seal,

2. When risers are used, the electrical line and the effluent dosing pipe may penetrate the riser wall provided the penetration is above the wet season high water table elevation and there is a soil-tight seal around the penetrations. When the top of the dosing tank is placed more than 8" inches below the finished grade, risers must be used to provide access within 8" inches of the finished grade. Where risers are used, risers must be attached to the tank in accordance with paragraph 62-6.013(2)(i), F.A.C. Any unused tank outlet must be sealed with a length of capped PVC pipe installed in accordance with paragraph 62-6.013(2)(f), F.A.C., or

3. Through a 2 to 4" inch access port installed in the tank lid by the manufacturer as approved by the Department. After installation the port must be sealed with a bonding compound per paragraph 62-6.013(2)(i), F.A.C. Unused ports must be sealed watertight with cement or bonding compound or with a length of capped PVC pipe.

(c) When a pump is used as part of a system, the following conditions must apply.

1. Pumps used to distribute sewage effluent must be certified by the manufacturer to be suitable for such purpose or pumps must be designed in accordance with the Sump and Sewage Pump Manufacturers Association's Recommended Standards for Sump, Effluent and Sewage Pumps (2019 Revision) for the purpose intended, herein adopted and incorporated by reference. This standard has been deemed copyright protected and is available from the publisher at the Sump and Sewage Pump Manufacturers Association, P.O. Box 44071, Indianapolis, Indiana, 46244, or at publisher's website at www.sspma.org/, and is available for inspection as provided in subsection (12) below. The use of a timer as part of any pump system is not allowed unless it is part of a design submitted by an engineer, or master septic tank contractor, and is approved by the Department.

2. An audio and visual high water alarm must be provided in a conspicuous location visible by system users to warn of pump failures. If the alarm is located outdoors, the alarm must be waterproof and specified by the manufacturer for outdoor use.

3. A pump must be placed in a separate compartment or tank, except when using a pump chamber insert. Except as noted below, any compartment or tank in which a pump is located must not be considered when determining total effective capacity of a septic tank.

4. A pump chamber insert may, at the applicant's discretion, be used to house a pump inside a septic tank. If a pump chamber insert is used, it must be approved for use by the Department. Approval must be based on the ability of the pump chamber insert to effectively filter solids from the effluent prior to intake by the pump. The efficiency of solids removal by the pump chamber insert must be at least equal to a currently approved outlet filter device. Pump chamber inserts that do not meet these criteria must not be approved and must not be used. The filter device used as part of the pump chamber insert must be considered to meet the requirement of using an outlet filter device for purposes of subsection 62-6.008(2), F.A.C. The tank or compartment used to house the pump chamber insert must be included in calculating the minimum effective capacity of the tank, subject to the following conditions:

a. When placed in a compartmentalized tank or tanks in series, the pump chamber insert must be placed in the last chamber or tank. When placed in a single compartment tank, the pump chamber insert must be placed as close to the outlet side of the tank as possible. In no case must the insert be placed farther than 1/2 the distance to the inlet as measured from the outlet of the tank. The pump chamber insert and filter must be accessible for routine maintenance. The manufacturer must provide instructions on how to maintain the filter unit and the insert device.

b. Pump levels must be set so that the high water alarm is activated when the liquid level of the tank will exceed the height of the inlet invert of the tank. The pump-on switch must be set to maintain the greatest possible effective capacity of the tank, and in no case must it be set higher than 1 inch below the inlet invert. Floats used for operation of the pump must be allowed outside the pump chamber insert.

c. The intake openings of the pump chamber insert must not be located within 12" inches of the bottom of the tank, or within 12" inches of the liquid level line of the tank.

d. The volume discharged by the pump must not exceed 1/4 of the average daily sewage flow in any dose.

e. A pump chamber insert must not be used when the total absorption area for the system is greater than 1,000' square feet, or when automatic dosing is required.

f. For new system installations, in addition to the requirements above, the total septic tank capacity must include the required minimum septic tank effective capacity, which must be contained below the pump-off switch level, plus the pumping tank capacity per Table II, plus the required 15% airspace.

g. For repair installations, in addition to the requirements of subparagraphs a. through e. above, pump chamber inserts must not be used in an existing septic tank of less than 750 gallons effective capacity. In addition, the minimum tank liquid depth must be 36" inches below the pump-off switch level and the minimum effective capacity contained below the pump-off switch level must be within two tank sizes of that required in Rule 62-6.008, F.A.C., Table II. The total septic tank capacity must include the minimum effective capacity within two tank sizes of required tank size, plus dosing capacity, plus dosing reserve capacity equal to the dosing capacity, plus freeboard or air space capacity which is equal to 15% of the minimum effective capacity.

(10) Transportation and installation.

(a) Onsite sewage tanks must not be removed from the manufacturer's facility until the compressive strength of the concrete has reached 75% of the design strength. Use of concrete industry published graphs or tables indicating compressive strength vs. concrete age for the design mix are satisfactory proof of strength.

(b) Tanks must be installed level from end to end and side to side. As used in this context, level includes a slope from the inlet

end to the outlet end or from side to side of the tank not exceeding one-half inch over the entire length or width of the tank. The tank must not be approved with any pitch upward from the inlet end to the outlet end of the tank.

(c) If a pumping device has been placed in the building sewer, an inlet device must be used.

(d) Cast in place tanks or tanks manufactured with water stops below the invert of the outlet, and tanks with seams below the invert of the outlet must be watertightness tested in accordance with ASTM C-1227-20, Standard Specification for Precast Concrete Septic Tanks, paragraph 9.2.2, after installation in the field. This standard is incorporated by reference in subparagraph 62-6.013(1)(b)3., F.A.C., effective 06-21-2022.

(e) The excavation for the installation of a tank must be level and free of debris and rocks that could damage the tank or prevent proper leveling, backfilling or compaction. Backfill material must be free of rocks and debris. The installer must refer to the tank manufacturer's installation instructions to prevent the tank from settling or floating or from being damaged or distorted.

(11) Repair of tanks – Repairs are allowed for tanks prior to shipment per ASTM, ACI, PCA standards and publications and National Precast Concrete Association (NPCA), Septic Tank Manufacturing Best Practices Manual (2010), herein adopted and incorporated by reference. This document has been deemed copyright protected and is available from the publisher at the National Precast Concrete Association, 1320 City Centre Drive, Suite 200, Carmel, Indiana 46032, or at publisher's website at www.precast.org/, and is available for inspection as provided in subsection (12) below. Tanks damaged after they leave the manufacturer's facility may be repaired for the following defects:

(a) Chips that do not penetrate more than 1/3 of the wall thickness and cracks that occur above the invert of the outlet. For fiberglass, polyethylene, or polypropylene tanks, holes above the invert of the outlet with a maximum dimension of up to one inch for fiberglass and half an inch for polyethylene or polypropylene, using procedures established by the manufacturer to restore watertightness by a person authorized by the manufacturer.

(b) Damaged or missing inlet and outlet seals may be replaced using the procedure of the document entitled "Repair of Tank Inlet and Outlet Seals", effective 06-21-2022, herein adopted and incorporated by reference. Copies of this document are available as provided in subsection (12), below and at <http://www.flrules.org/Gateway/reference.asp?No=Ref-14368>.

(c) Chips that occur below the invert of the outlet, provided that such chips do not penetrate more than 1/3 of the wall or bottom thickness.

(12) All materials incorporated herein may be obtained from the Department of Environmental Protection, Onsite Sewage Program at www.floridadep.gov or 2600 Blair Stone Road, MS #3596, Tallahassee, Florida 32399-2400 or Florida Department of State, Florida Administrative Code and Register, R.A. Gray Building, 500 South Bronough Street, Tallahassee, Florida 32399-0250. Reference materials deemed copyright protected are available for inspection at the same address.

Rulemaking Authority 381.0065(3)(a), 381.0065(4)(e) FS. Law Implemented 381.0065 FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.55, Amended 3-17-92, 1-3-95, Formerly 10D-6.055, Amended 11-19-97, 2-3-98, 3-22-00, 4-21-02, 5-24-04, 11-26-06, 6-25-09, 4-28-10, Formerly 64E-6.013, Amended 6-21-22.

62-6.014 Construction Standards for Drainfield Systems.

(1) Distribution box – where distribution boxes are used for distributing sewage from the septic tank or other onsite sewage tank to the drainfield lines, the following requirements must be adhered to:

(a) Distribution boxes must be watertight, constructed of durable materials, have adequate structural strength, and be of sufficient size to accommodate the required number of drainfield lines.

(b) Each drainfield line must be connected individually to the box.

(c) The invert of inlets to the box must be at least 1" inch above the invert of the outlets. The invert of all outlets must be level with respect to each other.

(d) The distribution box must be built as a separate unit from the septic tank and must be set level on solid ground or in mineral aggregate.

(2) Header pipe – header pipe, when used, must be installed in compliance with the following requirements:

(a) Header pipe must meet one or more of the following requirements:

1. ASTM D-3034-21, Standard Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings (2021), herein adopted and incorporated by reference. This standard has been deemed copyright protected and is available from the publisher at ASTM International, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959, or at publisher's website at www.astm.org/, and is available for inspection as provided in subsection (6) below.

2. ASTM D-2729-21 Standard Specification for Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings (2021), herein adopted and incorporated by reference. This standard has been deemed copyright protected and is available from the publisher at ASTM International, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959, or at publisher's website at www.astm.org/, and is available for inspection as provided in subsection (6) below.

3. AASHTO M252-18 Standard Specification for Corrugated Polyethylene Drainage Pipe (2018), herein adopted and incorporated by reference. This standard has been deemed copyright protected and is available from the publisher at American Association of State Highway and Transportation Officials, 444 North Capitol Street N.W., Suite 249, Washington D.C. 20001, and is available for inspection as provided in subsection (6) below.

4. ASTM F-667/667M-16R21, Standard Specification for 3 through 24 in. Corrugated Polyethylene Pipe and Fittings (2021), herein adopted and incorporated by reference. This standard has been deemed copyright protected and is available from the publisher at ASTM International, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959, or at publisher's website at www.astm.org/, and is available for inspection as provided in subsection (6) below.

5. ASTM F-810-12R18, Standard Specification for Smoothwall Polyethylene (PE) Pipe for Use in Drainage and Waste Disposal Absorption Fields (2018), herein adopted and incorporated by reference. This standard has been deemed copyright protected and is available from the publisher at ASTM International, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959, or at publisher's website at www.astm.org/, and is available for inspection as provided in subsection (6) below.

(b) Corrugated or smooth wall fittings (elbows, tees and crosses) shall be acceptable for gravity flow headers. Header pipe interior must be smooth. Header pipe must have a minimum inside diameter of 4" inches for gravity flow applications. Header pipe must not be perforated.

(c) The header pipe must be laid level with direct, connections to each drainfield line and the septic tank outlet pipe. When installed in a drainfield which uses mineral aggregate, the header pipe must be encased in mineral aggregate, and must be included as part of the drainfield area. Gravity flow header pipes, when installed within the mineral aggregate drainfield, may be non-watertight but must be soil tight. Snap connections are acceptable. On non-mineral aggregate systems, header pipe must be supported by soil. All connections must be such that all joints or fittings are firmly connected to pipes. When a drainfield system is a pumped system, the header pipe and fittings must be smooth-walled and watertight. Where the header pipe is not within the absorption surface area it must not be included in drainfield size calculations, but must be considered part of the system. The header pipe must be designed to distribute effluent as equally as practical to each individual drain line and must be supported so that the header is laid level.

(d) Pipe which connects the septic tank outlet to the header pipe or a distribution box must comply with the strength and material standards for header pipe as specified in this subsection.

(3) Low-Pressure dosing – where the total required area of drainfield is greater than 1,000 square feet or where the applicant proposes to use low-pressure dosing, an automatic dosing device discharging into a low pressure distribution network consisting of 2" inch or smaller diameter schedule 40 PVC or equal pipe with 1/2" inch or smaller diameter drilled holes must be used. All piping must use solvent welded connections or equal throughout to prevent dislocation of connections under pressure. The network must be designed for equal distribution of effluent. For the purposes of this section, equal distribution means that the flow from the least effective hole in the network must deliver no less than 75% of the flow from the most effective hole. The selected pump capacity (as measured in Gallons Per Minute) versus total dynamic head must be indicated on a pump curve and must be shown by calculation to achieve an effluent velocity through the network of at least 2' ft. per second to the first exit hole on each lateral. Each line of the pressure network must individually connect to a pressure manifold and be sealed on their distal ends and must not be looped with other lines regardless of whether the drainfield is a bed or a trench or whether it is in a mound, filled subsurface installation. Plans and equipment specifications for low-pressure dosing systems must be approved by the Department prior to construction or installation.

(a) Where the total drainfield area is greater than 1,000' square feet but not more than 2,000' square feet, the applicant may, in lieu of low-pressure dosing, choose to split the drainfield into two drainfields, equal in size, each having no more than 1,000' square feet, with each drainfield being lift-dosed alternately.

(b) Dosing systems with 2,000' square feet of drainfield or less must consist of a pump tank that receives the flow from a septic tank or other onsite sewage tank. Two pumps must be required for commercial use where dosing is required due to drainfield size or where gravity flow into the drainfield is not possible, and estimated establishment sewage flows exceed 500 gallons per day. Where more than one pump is used, the pumps must dose alternately. Where dosing is required for a commercial system for flows of 500

gallons or less per day, only one pump is required if the drainfield does not exceed 2,000' square feet.

(c) Systems having more than 2,000' square feet of drainfield must have a minimum of two dosing pumps, with each pump serving a proportionate amount of the total required absorption area. The pumps must dose alternately.

(d) The volume dosed between the pump operating levels must be adequate to assure that the entire drain pipe network is filled at least four times each cycle.

(e) When a drainfield is installed in slightly limited soil, operating levels must be adjusted to dose the drainfield a maximum of six times in a 24 hour period. For moderately limited soils the drainfield must be dosed no more than four times in a 24 hour period. More frequent dosing may be allowed with systems designed by engineers licensed in the state of Florida.

(f) The distribution network for drainfields having an absorption area less than 1,500' square feet must be designed by a Florida licensed professional engineer or a master septic tank contractor. The network for drainfields having an absorption area of 1,500' square feet or larger must be designed by a Florida licensed professional engineer.

(g) Drip emitter systems must be designed in accordance with subsection 62-6.009(5), F.A.C.

(4) Lift dosing – Where a septic tank or sewage waste receptacle is placed too low to permit gravity flow into a properly designed, constructed and located drainfield, a pump tank with a pump or similar type device must be used to lift the effluent to a properly constructed header pipe or distribution box for effluent distribution by gravity to the drainfield. This provision must apply only to drainfields of 1,000 square feet or less of total absorption area. Tank size and pumps with effluent level controls and alarms must be set in accordance with the requirements set forth in subsection 62-6.013(9), F.A.C.

(5) Drain trenches and absorption beds – drain trenches and absorption beds are the standard subsurface drainfield systems used for disposing of effluent from septic tanks or other sewage tanks. When used, these systems must be constructed as specified below.

(a) When utilizing the standard drain trench method, the width of the trench at the bottom must not exceed 36" inches. For trenches of 12" inches or less, there must be a minimum separation distance of 12" inches between the sidewalls of adjacent trenches; trenches greater than 12 inches require a minimum 24" inch separation between the sidewalls of adjacent trenches.

(b) The trench method must be the preferred method. Absorption beds may be used in lieu of the standard drain trench method. An absorption bed consists of an area in which the entire earth content of the required absorption area is removed and replaced with aggregate and distribution pipe or other approved alternative drainfield components. The distance between the centers of distribution lines in standard beds must be a maximum of 36" inches. The distance between the sidewall of the bed and the center of the outside drain line must be no more than 18 inches, but must not be less than six inches. Where header pipe is used in lieu of a distribution box, the header must extend to within 18 inches of the bed sidewalls. In no case must the bottom surface of an absorption bed exceed a total of 1,500' square feet. Where two or more beds are used to obtain the necessary absorption area, there must be a minimum 10 foot separation between the sidewalls of adjacent absorption beds. Absorption beds must be designed to achieve the maximum length to width ratio practical.

(c) When installing a drainfield system that uses mineral aggregate, all portions of the header pipe and perforated drain pipe must be installed in aggregate conforming to ASTM C33/C33M-18, Standard Specification for Concrete Aggregates (2018) or lightweight aggregate conforming to ASTM C330/C330M-17a Standard Specification for Lightweight Aggregates for Structural Concrete (2017), herein adopted and incorporated by reference. These standards have been deemed copyright protected and are available from the publisher at ASTM International, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959, or at publisher's website at www.astm.org/, and are available for inspection as provided in subsection (6) below. Aggregate must meet State of Florida Department of Transportation (FDOT) specifications under Section 901, "Standard Specifications for Road and Bridge Construction, January 2019" herein adopted and incorporated by reference. Copies of this document are available as provided in subsection (6) below and at <http://www.flrules.org/Gateway/reference.asp?No=Ref-14369>. Aggregate must also meet the following gradation requirements.

Sieve size	2 IN.	1 1/2 IN.	1 IN.	3/4 IN.	1/2 IN.	3/8 IN.	No. 4
Percent passing	90-100	35-100	15-100	0-70	0-50	0-30	0-5

In addition, not more than 3.75% by weight of the aggregate material at the point of use must pass a #200 sieve.

1. Approved materials for drainfield mineral aggregate must be limestone, slag, quartz rock, granite, river gravel, recycled crushed concrete, lightweight aggregate and other equally durable materials.

2. The aggregate must be labeled as drainfield aggregate on the freight bill-of-lading. Effective March 1, 1995, a copy of the freight bill-of-lading must be part of the documentation of aggregate size and quality and records must be available for Department

review for a period of two years from the date of purchase. This bill-of-lading must clearly certify that the material meets the requirements for drainfield use.

(d) Mineral aggregate material must have a total depth of at least 12" inches extending throughout the width of the trench or absorption bed. The distribution pipe must have a minimum of six inches of aggregate under the pipe, but must not exceed 10" inches under the pipe when the total depth of aggregate is 12" inches.

(e) The drainfield in place must be protected from infiltration of earth backfill by a barrier of polyester bonded filament. The barrier must be placed on top of the drainfield only. For alternative drainfield systems any required earth backfill barrier must be as specified by the alternative system manufacturer, which must be approved by the Department at the time of the initial alternative drainfield approval.

(f) Providing the requirements of subsections 62-6.006(1), (2) and (6), F.A.C., are met, the maximum depth from the bottom of the drainfield to the finished ground surface must not exceed 30 inches after natural settling. The minimum earth cover over the top of the drainfield, distribution box or header pipe in standard subsurface drainfields must be 6 inches after natural settling.

(g) The inside diameter of the drain pipe used in drainfields must be determined based on the type and design of the proposed absorption system. However, for standard gravity aggregate drainfield systems, inside pipe diameter must not be less than 4 inches. Perforated pipe must have two rows of holes, and a minimum perforated area of 1 1/2" square inches per linear foot. Perforations must be located not less than 30° or more than 60° from the vertical on either side of the center line of the bottom of the pipe. However, for drainfield systems designed by an engineer, drain pipe perforation area and hole configuration must assure that effluent is distributed as equally as possible throughout the drainfield area. All plastic pipe must conform to the standards of ASTM D-3034-21, Standard Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings (2021), incorporated by reference in subparagraph 62-6.014(2)(a)1., F.A.C. ASTM F 667/667M-16R21, Standard Specification for 3 through 24 in. Corrugated Polyethylene Pipe and Fittings (2021), incorporated in subparagraph 62-6.014(2)(a)4., F.A.C., or ASTM F-810-12R18, Standard Specification for Smoothwall Polyethylene (PE) Pipe for Use in Drainage and Waste Disposal Absorption Fields as incorporated by reference in subparagraph 62-6.014(2)(a)5., F.A.C.

(h) Depending on the type of drainfield system being utilized, the drainfield absorption surface must be constructed level or with a downward slope not exceeding one inch per 10' feet. Drain lines must be placed at the same slope as the drainfield absorption surface.

(i) The maximum length of drain lines must not exceed 100' feet for all gravity-fed and lift-dosed drainfields, and where two or more drain lines are used, they must be, as near as practical, the same length. The ends of two or more drain lines in bed and mound systems must be connected to produce a continuous circuit. A continuous circuit arrangement is also recommended but not required for standard drain trench systems. However, when a continuous circuit arrangement is not used, the distal ends of the drain lines must be capped or sealed.

(j) No part of a drainfield must be placed within 18" inches of the treatment or pump tank.

(k) If lots are encountered whereby a standard drainfield system cannot meet drainfield slope or soil cover requirements, a drop box configuration for sloping lots as per Section 7.2.8.1, Chapter 7, EPA 625/1-80-012, Design Manual for Onsite Wastewater Treatment and Disposal Systems, such section hereby incorporated by reference, may be used at the installer's discretion for drainfield construction.

(6) All materials incorporated herein may be obtained from the Department of Environmental Protection, Onsite Sewage Program at www.floridadep.gov or 2600 Blair Stone Road, MS #3596, Tallahassee, Florida 32399-2400 or Florida Department of State, Florida Administrative Code and Register, R.A. Gray Building, 500 South Bronough Street, Tallahassee, Florida 32399-0250. Reference materials deemed copyright protected are available for inspection at the same address.

Rulemaking Authority 381.0065(3)(a), 381.0065(4)(e) FS. Law Implemented 381.0065 FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.56, Amended 3-17-92, 1-3-95, Formerly 10D-6.056, Amended 2-3-98, 3-22-00, 5-24-04, 11-26-06, 6-25-09, 7-16-13, Formerly 64E-6.014, Amended 6-21-22.

62-6.015 Permitting and Construction of Repairs.

All repairs made to a failing onsite sewage treatment and disposal system shall be made only with prior knowledge and written approval from the Department having jurisdiction over the system. Approval shall be granted only if all of the following conditions are met:

(1) Any property owner or lessee who has an onsite sewage treatment and disposal system which is improperly constructed or

maintained, or which fails to function in a safe or sanitary manner shall request from the Department, either directly or through their agent, a permit to repair the system prior to initiating repair of the system. A permit shall be issued on Form DEP 4016 only after the submission of an application accompanied by the necessary exhibits and fees. Form DEP 4015 shall be used for this purpose, and can be obtained from the Department. Applications shall contain the following information:

(a) A site plan showing property dimensions, the existing and proposed system configuration and location on the property, the building location, potable and non-potable water lines, within the existing and proposed drainfield repair area, the general slope of the property, property lines and easements, any obstructed areas, any private or public wells, or any surface water bodies and stormwater systems in proximity to the onsite sewage system which restricts replacement or relocation of the drainfield system. The existing drainfield type shall be described. For example, mineral aggregate, non-mineral aggregate, chambers, or other.

(b) The size of the septic tank or other treatment tank currently in use and the approximate square footage and elevation of the drainfield existing on the site.

(c) The quantity and type of waste being discharged to the system. Where water use records cannot be obtained, estimates shall be made from values found in Rule 62-6.008, Table I, F.A.C.

(d) The soil textures encountered within the existing and proposed drainfield areas, and the estimated water table during the wettest season of the year.

(e) Any unusual site conditions which may influence the system design or function such as sloping property, drainage structures such as roof drains or curtain drains, and any obstructions such as patios, decks, swimming pools or parking areas.

(f) The person performing the site evaluation shall provide a brief description of the nature of the failure which is occurring.

(2) Site evaluations necessary to obtain the above referenced information shall be conducted at the expense of the owner or lessee by Department personnel, by an engineer who is licensed in the State of Florida or by other qualified persons as per subsection 62-6.004(3), F.A.C. Site specific information may be obtained by the applicant through examination of Department records of permits previously issued for the site.

(3) When a repair is to be performed on a failing system in which the contractor will be using any method other than drainfield addition or replacement, the following additional permit application information shall be submitted to the Department by the contractor in addition to the information required in subsections 62-6.015(1) and (2), F.A.C.

(a) The process used to repair the system. Examples include high-pressure water jetting of drainlines and high-pressure injection of air alongside the drainfield. Such information shall include the manner in which the proposed repair will take place. The manufacturers recommended method for product use, quantities and concentration of product, shall be included in this information.

(b) Any chemical compound to be introduced into the system in an effort to repair the system shall be identified by chemical composition or trade name, including the concentration and quantity of product used. The method of product introduction shall be stated. For example, product introduced through the distribution box.

(c) Any repair method proposed which intends to physically disrupt the absorption surface shall include a drawing of the drainfield system that includes a diagram of the sites where the absorption surface will be disrupted. The depth of each disruption shall be recorded at each site.

(4) Where the absorption surface of the drainfield is within 6" inches of the wet season high water table, an alternative repair method addressed in subsection 62-6.015(3), F.A.C., shall not be used. The existing drainfield shall be removed and a replacement drainfield shall be installed in accordance with all other repair criteria, including separation from seasonal high water table and drainfield sizing. Paragraph 62-6.015(6)(f), F.A.C., shall be used to determine septic tank conformance.

(5) The Department shall make every effort to issue a permit within 2 working days after receiving the application for system repair. Repair permits shall be valid for 90 days from the date of issuance. However, if the system is maintained to not create a sanitary nuisance, a repair permit shall be extended for one 90 day period.

(6) Construction materials used in system repairs shall be of the same quality as those required for new system construction. Aggregate and soil in spoil material from drainfield repairs shall not be used in system repair in any manner. Undamaged infiltration units, pipes and mechanical components may be reused on the original site. Any spoil material taken off site shall be disposed of in a permitted landfill or shall be limed and stockpiled for at least 30 days to prevent a sanitary nuisance. Offsite spoil material stockpile areas shall meet the prohibition requirements of subsection 62-701.300(2), F.A.C. The resulting lime-treated material shall not be used for drainfield repair, or construction of any onsite sewage treatment and disposal system. Any use of the lime treated material shall not cause a violation of Chapter 386 F.S., and shall not impair groundwater or surface water. Mineral aggregate and soil in spoil material may, at the option of the septic tank contractor and the property owner, be buried on site if limed before burial. Lime

amount must be sufficient to preclude a sanitary nuisance. Depth of seasonal high water table to the spoil material must be at least six inches. Setbacks for buried spoil material shall be the same as for onsite sewage treatment and disposal system drainfields. A minimum of six inches of slightly or moderately limited soil shall cover the spoil material and shall extend to at least five feet around the perimeter of the burial site. Any failing system shall, at a minimum, be repaired in accordance with the following criteria:

(a) System repairs shall comply with minimum setbacks and separations as specified in Rule 62-6.005, F.A.C. If current required setbacks and separations cannot be met, lesser setbacks as specified in Table V shall be maintained. For repairs only, if current required setbacks given below cannot be attained, absolute minimum setbacks shall be met. When site conditions exist which allow either absolute or current required setbacks to various features, current required setbacks shall be maintained from features with the highest protection factor. Setbacks to features with lower protection factors shall be reduced to the maximum setback or separation attainable, with no less than the absolute minimum setback allowed. A standard gravity flow system is to be used when possible to achieve the appropriate separations of absorption surface to seasonal high water and effective soil depth.

TABLE V				
Repair System Setback Requirements				
Permit Date of Original System	Description of Setback (Separation)	Protection Factor	Current Required Setback	Absolute Minimum Setback
Prior to 1-1-72	System to a Private Potable Well	6	75' feet	Greatest of the Following: (a) Maximum Setback (≤ 75 feet) (b) Original Setback (if ≥ 50 feet) (c) 50 feet
	Bottom of Drainfield Absorption Surface to Wet Season Water Table	5	24" inches	Greatest of the Following: (a) Maximum Separation (≥ 6 inches) (b) Original Separation (if ≥ 6 inches) (c) 6 inches
	Effective Soil Depth	5	42" inches	Greatest of the Following: (a) 24 inches (b) Maximum Separation (≥ 12 inches) (c) 12 inches
	System to Surface Water	4	50' feet	Greatest of the Following: (a) Maximum Setback (≥ 25 feet and ≤ 50 feet) (b) Original Setback (if ≥ 25 feet) (c) 25 feet
	System to Non-Potable Well	3	50' feet	Greatest of the Following: (a) Maximum Setback (≥ 25 feet and ≤ 50 feet) (b) Original Setback (if ≥ 25 feet) (c) 25 feet
	Drainfield Sidewall to Start of Slope	2	4' feet	Greatest of the Following: (a) Maximum Setback (≥ 2.5 feet) (b) 2.5 feet
	System to Property Line or Building Foundation	1	5' feet	Greatest of the Following: (a) Maximum Setback (≥ 2 feet) (b) 2 feet
1-1-72 to	System to a	6	75' feet	Greatest of the Following:

12-31-82	Private Potable Well			(a) Maximum Setback (≤ 75 feet and ≥ 50 feet) (b) Original Setback (if ≥ 50 feet) (c) 50 feet
	Bottom of Drainfield Absorption Surface to Wet Season Water Table	5	24" inches	Greatest of the Following: (a) Maximum Separation (≤ 24 inches and ≥ 6 inches) (b) Original Separation (if ≥ 6 inches) (c) 6 inches
	Effective Soil Depth	5	42" inches	Greatest of the Following: (a) 36 inches (b) Maximum Separation (≥ 24 inches) (c) 24 inches
	System to Surface Water	4	75' feet	Greatest of the Following: (a) Maximum Setback (≤ 75 feet and ≥ 50 feet) (b) Original Setback (if ≥ 50 feet) (c) 50 feet
	System to Non-Potable Well	3	50' feet	Greatest of the Following: (a) Maximum Setback (≤ 50 feet and ≥ 25 feet) (b) Original Setback (if ≥ 25 feet) (c) 25 feet
	Drainfield Sidewall to Start of Slope	2	4' feet	Greatest of the Following: (a) Maximum Separation (> 3 feet) (b) 3 feet
	System to Property Line or Building Foundation	1	5' feet	Greatest of the Following: (a) Maximum Setback (≥ 2 feet) (b) 2 feet
1-1-83 to Present	System to a Private Potable Well	6	75' feet	75 feet
	Bottom of Drainfield Absorption Surface to Wet Season Water Table	5	24" inches	Greatest of the Following: (a) Existing elevation (≥ 12 inches) (b) 12 inches
	Effective Soil Depth	5	42" inches	Greatest of the Following: (a) Maximum Separation (≥ 36 inches) (b) 36 inches
	System to Surface Water	4	75' feet	Greatest of the Following: (a) Maximum Setback (if > 50 feet) (b) 50 feet
	System to Non-Potable	3	50' feet	50 feet

	Well			
	Drainfield Sidewall to Start of Slope	2	4' feet	4 feet
	System to Property Line or Building Foundation	1	5' feet	Greatest of the Following: (a) Maximum Setback (if ≥ 2 feet) (b) 2 feet

Footnotes to Table V:

1. For sites which contain oolitic limestone, the minimum effective soil depth shall be 12" inches regardless of the date the original system was installed provided that the wet season water table is a minimum of 4' feet below the bottom surface of the drainfield.

2. Where severely limited soil underlies the drainfield, soil removal and replacement shall be performed as per Footnote 3. to Table III.

(b) For systems permitted on or after January 1, 1983, if system failure is due to excessive hydraulic loading, the original permitted drainfield shall be allowed to remain in service but shall have additional drainfield added to it. The resulting system drainfield size shall be 50 percent larger than the drainfield originally permitted, or shall be in compliance with drainfield sizing criteria specified in Rules 62-6.008 and 62-6.009, F.A.C., whichever is larger.

(c) Minimum sizing of drainfield repairs for residential systems installed prior to 1983 shall be based on the criteria specified below. Failed drainfields shall be replaced with drainfields meeting, at a minimum, the sizing criteria specified below.

1. If sufficient area is available, the existing drainfield can be left in place and used as part of the system. A new drainfield equal in size to, and separate from, the existing drainfield shall be added and flow directed to both the old and new drainfield.

2. Table VI and VII values are for subsurface and filled systems if the existing drainfield cannot be used as part of the repair. Mound trench systems shall be sized 10 percent larger than the values below and 20 percent larger if absorption beds are installed in the mound. The amount of drainfield installed during the repair shall not be less than the amount the system had prior to the repair.

TABLE VI		
Residential Sizing for Slightly Limited Soil Textures		
Number of	Square Feet of	Square Feet of
Bedrooms	Trench Area	Absorption Bed
1	75	100
2	150	200
3	225	300
4	300	400
Add per bedroom	75	100
TABLE VII		
Residential Sizing for Moderately Limited Soil Textures		
Number of	Square Feet of	Square Feet of
Bedrooms	Trench Area	Absorption Bed
1	100	125
2	200	250
3	300	375
4	400	500
Add per bedroom	100	125

(d) Repairs of commercial systems installed prior to 1983 shall be based on the following criteria:

1. Sewage flows shall be determined from values found in Table I of Rule 62-6.008, F.A.C., or on the highest monthly flow for the previous 18 month period from documented water use records, whichever is higher.

2. Failed drainfields shall at a minimum, meet the sizing criteria specified below.

a. If sufficient room is available, the existing drainfield can be left in place and used as part of the system. A new drainfield

equal in size to, and separate from, the existing failed drainfield shall be added.

b. Sewage loading rates to trench or absorption bed bottom areas shall be in accordance with the values in Table VIII which are applicable to subsurface and filled drainfield systems if the existing drainfield is replaced with a new drainfield. Mound trench systems shall be sized 10 percent larger than the values below and 20 percent larger if absorption beds are installed in the mound.

TABLE VIII		
Drainfield Sizing for Commercial Systems Installed		
Prior to 1983		
in gallons/square foot/day		
	Trenches	Absorption Beds
Slightly limited textures	1.00	0.80
Moderately limited textures	0.65	0.50

(e) Where the cause of system failure is determined to be from root clogging of the distribution box or drainfield line of a system, and where removal of the root mass and replacement of damaged drainfield material will restore the system to its original design function, upon inspection and verification of the repair work by the health unit, permit satisfaction will be considered to be achieved.

(f) A tank need not be replaced as part of the repair if the health unit determines the tank to be structurally sound, constructed of approved materials, and if such tank has an effective capacity within two tank sizes of the capacities required by Table II. In addition, the tank shall be pumped and a solids deflection device shall be installed as a part of the outlet of the tank if one is not currently in place.

(g) Repairs to a system shall not be located within 2' feet of a sleeved and sealed potable water line or 2' feet from non-potable water lines.

(h) If the total drainfield area exceeds 1,000' square feet, or if the tank is too low to permit gravity flow into the drainfield, the drainfield shall be dosed. The requirements of subsections 62-6.014(3) and (4), F.A.C., shall be used for dosing requirements.

(i) Setbacks from an existing system to a public well shall not be decreased from existing setbacks, but shall be increased where practical to achieve the required setbacks as per paragraphs 62-6.005(1)(b) and (c), F.A.C.

(7) If a repair cannot be made utilizing the standards in subsection (6) above, all available area for drainfield repair shall be assessed and the repair permit shall allow for the maximum size drainfield that can be accommodated in the available area while allowing for the system to be installed above the wet season water table. Total removal of the existing drainfield and replacement of the drainfield in its original location shall be authorized if there is no additional area to enlarge the system. Setbacks to wells, surface water bodies, and other pertinent features which are less than the setbacks in subsection (6) above, shall not be reduced below existing setbacks. Nothing in this section shall be construed to allow a drainfield to remain in the wet season water table. The appropriate requirements for bottom of drainfield absorption surface to wet season water table separation in Table V shall be adhered to in all repairs.

(8) If soil replacement is to be performed on any repair, the requirements of Footnote 3., Table III, shall be adhered to.

(9) System repairs shall be performed by persons who are qualified to do so as set forth in Part III of this rule.

(10) Except as provided for in subsection (7) above, the amount of drainfield installed during the repair shall not be less than the amount the system had prior to the repair.

(11) Subsection 62-6.004(7), F.A.C., shall be used in conjunction with this section when permitting a repair in which the property has been divided after the original permit was issued.

(12) For inspection purposes when a drainfield is repaired using a physical disruption method, such as air injection, the contractor shall mark the location of each injection site in an easily identifiable manner.

The Department shall inspect repairs to determine that the absorption surface of the repaired drainfield is at least six inches above the wet season high water table, to determine the repair process was completed according to the information provided with the repair permit application and to determine the repair site is free of sanitary nuisance conditions.

Rulemaking Authority 381.0065(3)(a) FS. Law Implemented 381.0065, 386.041 FS. History—New 3-17-92, Amended 1-3-95, 2-13-97, Formerly 10D-6.0571, Amended 2-3-98, 3-22-00, 5-24-04, 11-26-06, 6-25-09, 4-28-10, Formerly 64E-6.015.

62-6.0151 Product Composition.

(1) Any product sold or used in the state for use in an onsite sewage treatment and disposal system shall be in compliance with the requirements of Section 381.0065(4)(m), F.S. The following criteria shall be used in determining product compliance.

(a) Use of the product shall not result in violations of Surface Water Quality Rule 62-302.500, F.A.C., effective 5-15-2002, or Groundwater Quality Rules 62-520.400 and 62-520.420, F.A.C., effective 12-9-1996.

(b) The product's formula itself shall not exceed water quality contaminant concentrations in Rule 62-302.500, F.A.C., effective 5-15-2002, or Rules 62-520.400 and 62-520.420, F.A.C., effective 12-9-1996.

(c) The product shall contain no substance in concentrations or amounts that would interfere with or prevent the successful operation of an onsite sewage treatment and disposal system.

(2) If the Department determines an onsite sewage treatment and disposal system product is not in compliance with the criteria in Rule 62-6.0151, F.A.C., the Department shall notify the product manufacturer of the items in non-compliance. The product shall be allowed to be continued for sale and use in Florida for a maximum of 90 days from date of receipt of notification of violation. This is to allow the manufacturer an opportunity to exhibit to the Department that the product satisfactorily complies with the conditions of Section 381.0065(4)(m), F.S. and this rule. In attempting to demonstrate compliance with Section 381.0065(4)(m), F.S. and this rule, the manufacturer shall provide at a minimum the following information:

(a) A listing of all physical, chemical, biological or other agents which make up the product and provide toxicity information for each component. This information shall include trade names, chemical names, and concentrations of all individual or complexed components and the Material Safety Data Sheet (MSDS) for the product. Any trade secret will be treated according to Section 381.83, F.S.

(b) A list of all known, expected, or possible reactions and by-products resulting from use of the product including the effect on bacteria, all standard contents of the tank, including sludge layer; scum layer; fats, oils and greases, and the effects on currently approved drainfield distribution systems.

(c) Test results from a State or EPA-certified laboratory demonstrating that use of the product will not result in violations of surface water or groundwater standards in Rule 62-6.0151, F.A.C. Tests shall be conducted on the product as sold and the test results shall include:

1. Acute Definitive Toxicity test [96 hour LC₅₀] according to EPA Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (EPA-821-R-02-012), October 2002, herein incorporated by reference, for *Pimephales promelas* (fathead minnow) or any of the following species: *Ceriodaphnia dubia* (daphnid), *Cyprinella leedsi* (bannerfin shiner), *Daphnia pulex* and *Daphnia magna* (daphnids). The 96-hour LC₅₀ shall be reported as a concentration in mg/l or ml/l, and;

2. Chemical analysis showing the concentrations of Volatile Organic Compounds [EPA 8260] to a minimum detection level of 0.5 ug/L (ppb).

(d) A description of the anticipated use of the product in onsite sewage treatment and disposal systems. Where and how the product is to be applied, any exceptions to application guidelines, the frequency of applications, who is allowed to perform the applications, and the amount and concentration of product per application shall be included in the product description. When the product should not be used shall also be included in the description. The information provided shall include the manufacturer's recommended application rate of the product as it appears on the product label. Unless the product label provides other specifications, the Department, for purposes of this evaluation, assumes that the application rate will be applied to a flow of 300 gallons per day into a 1,000-gallon septic tank.

(e) All studies done on the use of the product which support or disputes the information required in Rule 62-6.0151, F.A.C., and which demonstrates the product will not harm public health or the environment and will not impair system components and functioning. Monitoring reports and data from systems in use shall be provided if available.

(f) A signed and dated certification by the manufacturer that states: "I certify under penalty of law that these documents and all attachments, to the best of my knowledge and belief, are true, accurate and complete, and represent all available data for [name of product or products]."

(g) Scientific documentation demonstrating claimed benefits occurring due to the use of the product.

(3) If the Department determines that the product does not comply with the provisions of Section 381.0065(4)(m), F.S., the Department shall stop the sale of the product or take other actions deemed necessary to preclude the sale and use of the non-compliant product.

62-6.016 U.S. Department of Agriculture Soil Textural Classification System.

Rulemaking Authority 381.0011(4), (13), 381.0065(3)(a) FS. Law Implemented 381.0065, 381.00655 FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.58, Amended 3-17-92, 1-3-95, Formerly 10D-6.058, Repealed 12-29-16.

Part II Florida Keys

62-6.017 Definitions.

Definitions in Chapter 62-6, Parts I and III, F.A.C., are also applicable to Chapter 62-6, Part II, F.A.C.

(1) Building Area – that enclosed area of a dwelling unit, excluding the garage, carport, exterior storage shed, or open or screened patios or decks. Calculations of building area shall be made by measurements of the outside building dimensions. Building area of each additional story of the structure shall be added to determine the total building area.

(2) Cesspit – a pit, with or without a cover, that receives untreated sewage from a building and discharges the sewage, either untreated or improperly treated, directly to the surrounding soil or limestone. A septic tank that functions as a cesspit shall be considered a cesspit.

(3) Injection well – an open vertical hole at least 90 feet in depth, fully cased and grouted to at least 60 feet in depth which is used to dispose of onsite sewage treatment and disposal system effluent.

(4) Minimum level of waste treatment – a treatment which will provide a recovered water product that contains not more, on a permitted annual average basis, than the following concentrations from a sampling point located following the final design treatment step of the onsite sewage treatment and disposal system:

(a) Biochemical Oxygen Demand (CBOD ₅)	10 mg/l
(b) Suspended Solids	10 mg/l
(c) Total Nitrogen, expressed as N	10 mg/l
(d) Total Phosphorus, expressed as P	1 mg/l

(5) Salt Marsh and Buttonwood Associations – two plant associations that are sometimes collectively or individually referred to as the “transitional zone.”

(a) The salt marsh community is a wetland area subject to tidal influence wherein the dominant vegetation includes the following:

1. *Batis maritima* Saltwort,
2. *Distichlis spicata* Salt grass,
3. *Fimbristylis castanea* Chestnut sedge,
4. *Monanthochloe littoralis* Key grass,
5. *Salicornia spp.* Glasswort,
6. *Sesuvium portulacastrum* Sea purslane; and,
7. *Spartina spp.* Cordgrass.

The woody vegetation that may be present includes red, white and black mangroves, as well as buttonwood (*Conocarpus erectus*); the salt marsh community is distinguished by the dominance of non-woody plants, and the woody species have a coverage of less than 40 percent. The salt marsh community may be associated and intermixed with areas of almost bare ground on which the vegetation may be limited to mats of algae.

(b) The buttonwood association is an association that is usually present in the more landward zone, and may intermix with more upland communities. The vegetation may include, but is not limited to, the following species:

1. *Borrchia spp.* Sea oxeye daisy,
2. *Bumelia celastrina* Saffron plum,
3. *Coccoloba uvifera* Sea grape,
4. *Conocarpus erectus* Buttonwood,
5. *Erithalis fruticosa* Black torch,
6. *Fimbristylis castanea* Chestnut sedge,
7. *Jacquinia keyensis* Joewood,

8. *Lycium carolinianum* Christmas berry,
9. *Maytenus phyllanthoides* Mayten; and,
10. *Spartina spp.* Cordgrass.

The buttonwood association is distinguished from the salt marsh association by the dominance of buttonwood trees, usually occurring as an open stand that permits the growth of an under-story of groundcovers and shrubs.

(6) Nutrient reducing material – material which is used in the final treatment stage of an onsite sewage treatment and disposal system to reduce effluent nutrient levels to the minimum level of waste treatment.

(7) Undocumented system – an onsite sewage treatment and disposal system that does not have a record of installation and approval.

Rulemaking Authority 381.0011(4), (13), 381.006, 381.0065(3)(a), (4)(k) FS., Ch. 99-395, LOF. Law Implemented 154.01, 381.001(2), 381.0011(4), 381.006(7), 381.0061, 381.0065, 381.00655, 386.041 FS., Ch. 99-395, LOF. History–New 7-15-86, Amended 3-17-92, 1-3-95, Formerly 10D-6.062, Amended 3-3-98, 3-22-00, Formerly 64E-6.017.

62-6.018 System Location, Design and Maintenance Criteria.

Table III of Chapter 62-6, Part I, F.A.C., and other subsections of Part I pertaining to soil texture, soil depth, and maximum sewage loading rates for specific soils shall not apply to areas subject to the provisions of this part except for Table III, Footnote 2., as it relates to the falling head percolation test procedure. However, approved system design criteria, system location, operation, maintenance and monitoring requirements of subsections 62-6.018(1), (2), (3), and (4), F.A.C., shall apply. A minimum of one soil profile and one percolation test per application shall be required for site evaluations performed in the Florida Keys. However, a soil profile and percolation test is not required when the system design engineer chooses the use of an injection well for effluent disposal. All new onsite sewage treatment and disposal systems shall be performance-based treatment systems designed by an engineer licensed in the State of Florida and shall meet the minimum level of waste treatment as defined in Rule 62-6.017, F.A.C. All receptacles subject to a positive buoyancy exposure shall be anchored or otherwise weighted to prevent flotation during flooding periods. The receptacles shall be evaluated for buoyancy while in their normal operating condition.

(1) An onsite sewage treatment and disposal system which meets the location, construction, maintenance and operational requirements of paragraph 62-6.018(1)(a) or (b), F.A.C., shall be approved, provided that if an aerobic treatment unit is a component of the system design, the certification, construction, operational and maintenance requirements of Rule 62-6.012, F.A.C., shall also be met.

(a) When final effluent disposal is into a nutrient reducing material-lined drainfield system, the following general requirements shall apply:

1. The Department shall require the installer of a nutrient reducing material lined drainfield system to provide certification from the installer's nutrient reducing material supplier that the material supplied for such type of installations meets the requirements of this subsection.

2. No part of the system shall be within 25' feet of the boundaries of surface water bodies or salt marsh and Buttonwood Association habitat areas where the dominant vegetation species are those typical of salt marsh communities.

3. The bottom surface of the nutrient reducing material layer shall be at least 12" inches above mean high water.

4. Appropriate shallow root vegetative cover shall be established over drainfield systems to maximize the beneficial effects of evapotranspiration.

5. Nutrient reducing material has a finite life span. The nutrient reducing material shall be replaced as necessary to ensure that the system continues to meet the minimum level of waste treatment.

(b) An injection well shall be approved for final effluent disposal provided setbacks from salt marsh/buttonwood habitats and other surface water bodies cannot be met by another effluent disposal system noted above, and provided the installation is in compliance with the following:

1. An injection well shall not be permitted or installed under the provisions of this part in any area designated by the United States Environmental Protection Agency or the Florida Department of Environmental Protection as having a single or sole source aquifer. Single source aquifer is defined in subsection 62-520.200(14), F.A.C.

2. In areas where injection wells are approved for use, the Monroe County Health Department shall be the permitting authority for the engineer designed onsite sewage treatment unit and the injection well, where the estimated daily domestic sewage flow will not exceed 2,000 gallons per day. For establishments having a total daily sewage flow greater than 2,000 gallons per day but not

greater than 10,000 gallons per day, the Monroe County Health Department shall be the permitting authority for the engineer designed treatment unit and DEP is the permitting authority for the injection well and any additional associated effluent treatment device.

3. The ground surface within a distance of at least 10' feet in all directions around the injection well and any portion of the onsite sewage treatment and disposal system shall not be subject to surface or ground water flooding. In addition, the invert of the effluent inlet pipe to the injection well shall be a minimum 18" inches above the estimated seasonal high water level.

4. If there is adequate vertical and horizontal clearance to allow for proper maintenance, repair or replacement of the treatment unit and injection well, such components of the onsite sewage treatment and disposal system shall be allowed to be placed beneath an elevated building.

5. Prior to discharge into an injection well, effluent shall be disinfected by chlorination or other disinfection method approved by the Department. A minimum disinfection level equivalent to a free chlorine residual of 0.5 milligrams per liter measured at the point of effluent discharge after a minimum chlorine contact time of 15 minutes into the injection well, shall be maintained in the effluent at all times.

6. An injection well to receive an estimated daily domestic sewage flow not exceeding 2,000 gallons per day shall meet minimum construction criteria of this sub-subparagraphs a., b., and c. The Monroe County Health Department shall be notified by the well driller the time when the well will be drilled so the Department can schedule observation of well construction. The Monroe County Health Department shall not approve an injection well for use until the well driller has certified, in writing to the Monroe County Health Department, that the well has been installed in compliance with the provisions of this subparagraph. The inspection fee for the construction of an injection well shall be \$125.00.

a. An injection well as defined in subsection 62-6.017(3), F.A.C., shall be constructed, in part, utilizing a casing of polyvinyl chloride, commonly referred to as PVC. The minimum PVC casing weight and strength classification shall be schedule 40 and the minimum outside diameter of the casing shall be 4" inches. Other casing materials having strength and corrosion resistance properties equal to or greater than PVC schedule 40 pipe shall also be approved.

b. An open hole having a minimum diameter of 6" inches shall extend to a depth of not less than 30 feet below the bottom of the casing.

c. The annular space between the casing and the natural rock wall of the borehole shall be grouted the full length of the casing.

7. A minimum of one maintenance visit every four months shall be made to those systems using injection wells for effluent disposal. The visit shall include an inspection of the chlorination unit and any filter units. When an aerobic treatment unit is a component of the onsite sewage treatment and disposal system, documents and reports required in Rule 62-6.012, F.A.C., shall also include the results of aerobic treatment unit inspections and shall include information on chlorine residuals to assess compliance with the disinfection requirements of this rule.

8. If an injection well is discontinued for effluent disposal the injection well shall be properly abandoned and plugged by filling the injection well from bottom to top with cement grout.

(2) For an aerobic treatment unit treating domestic sewage flows in excess of 1,500 gallons per day but not exceeding 10,000 gallons per day, where effluent from the treatment unit will be discharged to an engineer designed soil absorption drainfield system, the following requirements shall be met:

(a) The soil absorption drainfield system shall be set back from surface water bodies by the greatest distance attainable, but shall meet at least minimum setback and elevation requirements specified in subsection 62-6.018(1), F.A.C.

(b) The owner or lessee of a system shall comply with the general maintenance and operational requirements of subsections 62-6.012(2) and (3), F.A.C., and any additional operation and maintenance requirements specified by the system design engineer.

(3) The owner or lessee of a performance-based treatment system shall obtain and maintain a maintenance contract with an approved maintenance entity.

(a) All new onsite sewage treatment and disposal systems shall be inspected by an approved maintenance entity at least two times each year.

(b) A maintenance report shall be kept by the maintenance entity. A copy of all maintenance reports shall be provided to the Department. The report shall include the following information:

1. The address of the system.
2. Date and time of inspection.
3. Sample collection time and date, and person who collected sample.

4. Results of all sampling.
5. Volume of effluent treated, to include total monthly and daily average.
6. Maintenance performed.
7. Problems noted with the treatment system and actions taken or proposed to overcome them.

(4) In conjunction with the systems specified in subsections 62-6.018(1) and (2), F.A.C., an applicant may use the alternative systems described in subsection 62-6.009(1), (3), (4), (5) or (6), F.A.C. An alternative system shall meet the general intent of Part I and Part II of this rule.

Rulemaking Authority 381.0011(4), (13), 381.006, 381.0065(3)(a) FS., Ch. 99-395, LOF. Law Implemented 381.0065, 381.00655 FS., Ch. 99-395, LOF. History—New 7-15-86, Amended 3-17-92, 1-3-95, Formerly 10D-6.063, Amended 3-3-98, 3-22-00, 4-21-02, 11-26-06, Formerly 64E-6.018.

62-6.0181 System Repair and Cesspit and Undocumented System Replacement.

(1) Where a property is determined to have a cesspit or an undocumented system, the cesspit or undocumented system shall be required to be replaced with an onsite sewage treatment and disposal system complying with Rule 62-6.018, F.A.C.

(2) In areas that are scheduled to be served by a central sewer by December 31, 2015, where there is documentation from the sewer utility that the property is scheduled to be served by December 31, 2015, and there is documentation from the sewer utility or from the county tax collector's office that the property owner has paid or has signed an agreement to pay for connection to the central sewer system, an onsite sewage treatment and disposal system requiring repair shall be repaired to the standards in subsection 62-6.0181(3), F.A.C.

(3) Systems shall be repaired to the following standards provided no system shall be repaired to meet a lower standard of treatment than the treatment standard permitted or required to be met prior to the repair.

(a) A Class I aerobic treatment unit which meets the location, construction, maintenance and operational requirements of subparagraph 62-6.0181(3)(a)1. or 2., F.A.C., and the certification, construction, operational and maintenance requirements of Rule 62-6.012, F.A.C.

1. Where a Class I aerobic treatment unit is utilized, and where final effluent disposal is into a sand lined drainfield system, the following general requirements shall apply:

a. For a sand-lined drainfield, a minimum 12" inch thick layer of quartz sand shall be placed beneath the bottom of the drainfield absorption surface and a minimum 12" inch wide and minimum 24" inch thick layer of quartz sand shall be placed contiguous to the drainfield sidewall absorption surfaces in order to provide an additional level of effluent treatment prior to effluent passing into the surrounding natural limestone rock. Sand material shall have either an effective grain size in the range of 0.25 millimeter to 1.00 millimeter and shall have a uniformity coefficient of less than 3.5, or the material shall be of such size whereby at least 90 percent of the sand particles pass a U.S. Standard Number 18 sieve and less than 10 percent pass a number 60 sieve. These materials are in the USDA soil texture classes known as medium sand and coarse sand. The Department shall require the installer of a sand-lined drainfield system to provide certification from the installer's sand supplier that the sand supplied for such type of installation meets the requirements of this subsection.

b. No part of the system shall be within 25' feet of the mean high water line of tidal surface water bodies or within 25' feet of the ordinary high water line of lakes, ponds or other non-tidal surface waters or salt marsh and Buttonwood Association habitat areas where the dominant vegetation species are those typical of salt marsh communities.

c. The bottom surface of the sand layer shall be at least 12" inches above mean high water.

d. The maximum sewage loading rate to an aerobic treatment unit absorption bed drainfield with underlying sand liner shall be 1.1 gallons per square foot per day.

e. Appropriate shallow root vegetative cover shall be established over drainfield systems to maximize the beneficial effects of evapotranspiration.

2. Provided a Class I aerobic treatment unit is utilized and provided effluent from the treatment unit, prior to discharge into an injection well, is passed through a mineral aggregate filter unit as described in subparagraph 62-6.0181(3)(a)2., F.A.C., or where effluent is passed through a filter unit of another design which has been determined by the Department to be at least equal to the mineral aggregate filter unit with regard to sewage treatment capability, an injection well shall be approved in compliance with the following:

a. An injection well shall not be permitted or installed under the provisions of this part in any area designated by the United States Environmental Protection Agency or the Florida Department of Environmental Protection as having a single or sole source

aquifer. Single source aquifer is defined in subsection 62-520.200(14), F.A.C.

b. In areas where injection wells are approved for use, the Monroe County Health Department shall be the permitting agent for the aerobic treatment unit, the filter unit and the injection well, where the estimated daily domestic sewage flow will not exceed 2,000 gallons per day. For establishments having a total daily sewage flow greater than 2,000 gallons per day but not greater than 10,000 gallons per day, the Monroe County Health Department shall be the permitting authority for the aerobic treatment unit and the filter unit and DEP is the permitting agent for the injection well and any additional associated effluent treatment device. The effluent from the treatment unit permitted by the Monroe County Health Department shall not exceed 20 mg/l CBOD₅ or 20 mg/l suspended solids on a permitted annual average basis and shall have disinfection in accordance with sub-subparagraph 62-6.0181(3)(a)2.h., F.A.C., prior to discharge into any injection well.

c. The interior of the aerobic treatment unit, the top surface of the mineral aggregate filter soil cover, and the ground surface within a distance of at least 10 feet in all directions around the injection well, filter unit and aerobic treatment unit shall not be subject to surface or ground water flooding. In addition, the invert of the effluent inlet pipe to the injection well shall be a minimum 18 inches above the estimated seasonal high water level.

d. If there is adequate vertical and horizontal clearance to allow for proper maintenance, repair or replacement of the aerobic treatment unit, filter unit and injection well, such components of the onsite sewage treatment and disposal system shall be allowed to be placed beneath an elevated building.

e. If a mineral aggregate filter as referred to in subparagraph 62-6.0181(3)(a)2., F.A.C., is utilized, effluent discharge from the aerobic unit shall be by gravity or pressure distribution to a perforated pipe distribution system as specified in Part I, Rule 62-6.014, F.A.C. Such distribution system shall be placed within the walls of the mineral aggregate filter and shall be placed above a mineral aggregate filter layer which shall be at least 24 inches thick. Mineral aggregate filter material shall have either an effective size in the range of 2.36 millimeters to 4.75 millimeters and shall have a uniformity coefficient of less than 3.5 or the material shall be equivalent in size to Florida Department of Transportation aggregate classification number eight or nine. The system designer may specify additional layers of filter material above or below the required 24"-inch layer of filter material. The Monroe County Health Department shall require the installer of mineral aggregate filter systems to provide certification from the installer's mineral aggregate supplier that the aggregate supplied meets requirements of this sub-paragraph. If the filter is not sealed with a lid meeting the requirements of paragraph 62-6.013(1)(e), F.A.C., the filter shall be capped with a layer of slightly limited soil no less than 6 nor more than 12 inches thick.

f. The maximum sewage loading rate to the mineral aggregate filter shall be 5.5 gallons per square foot per day based upon the top surface area of the filter layer. The maximum sewage loading rate to an approved filter unit other than a mineral aggregate filter as described in this section shall be evaluated by the Department based on unit design, size, filter media characteristics and expected functional life of the unit.

g. Effluent having passed through a mineral aggregate filter shall collect in an underdrain for gravity or mechanical discharge into an injection well. The underdrain shall consist of minimum 4 inch diameter perforated drainpipe which is encased within a minimum 8 inch depth of 1/2 to 2" inch diameter washed and durable aggregate. The walls and bottom of the filter unit shall be reinforced concrete or other material of adequate strength and durability to withstand hydrostatic and earth stresses to which the unit will be subjected. The walls and bottom of the unit shall be made waterproof so that the total volume of effluent passed through the mineral aggregate filter will be collected in the filter underdrain for discharge into the injection well.

h. Prior to discharge into an injection well, effluent from the filter unit shall be disinfected by chlorination or other disinfection method approved by the Department. A minimum disinfection level equivalent to a free chlorine residual of 0.5 milligram per liter measured at the point of effluent discharge after a minimum chlorine contact time of 15 minutes into the injection well, shall be maintained in the effluent at all times.

i. An injection well to receive an estimated daily domestic sewage flow not exceeding 2000 gallons per day shall meet minimum construction criteria of this sub-sub-paragraphs (I), (II) and (III). The Monroe County Health Department shall not approve an injection well for use until the well driller has certified, in writing to the Monroe County Health Department, that the well has been installed in compliance with the provisions of this sub-paragraph. The inspection fee for the construction of an injection well shall be \$125.00.

(I) An injection well as defined in subsection 62-6.017(3), F.A.C., shall be constructed, in part, utilizing a casing of polyvinyl chloride, commonly referred to as PVC. The minimum PVC casing weight and strength classification shall be schedule 40 and the minimum outside diameter of the casing shall be 4 inches. Other casing materials having strength and corrosion resistance properties

equal to or greater than PVC schedule 40 pipe shall also be approved.

(II) An open hole having a minimum diameter of 6" inches shall extend to a depth of not less than 30 feet below the bottom of the casing.

(III) The annular space between the casing and the natural rock wall of the borehole shall be grouted the full length of the casing.

j. A minimum of one maintenance visit every four months shall be made to those systems using injection wells for effluent disposal. In addition to the standard aerobic treatment unit maintenance visit, the visit shall include an inspection of the chlorination and filter units. Documents and reports required in Rule 62-6.012, F.A.C., shall also include the results of these inspections and shall include information on chlorine residuals to assess compliance with the disinfection requirements of this rule.

k. If an injection well is discontinued for effluent disposal use such injection well shall be properly abandoned and plugged by filling the injection well from bottom to top with cement grout.

(b) The following general requirements apply for the repair of a septic tank system:

1. The existing tanks shall meet the requirements of paragraph 62-6.015(6)(f), F.A.C., or, if the tanks need to be replaced as part of the repair, they shall be replaced with tanks meeting the requirements of Table II and Rule 62-6.013, F.A.C.

2. Effluent from the septic tank shall discharge to a drainfield over a sand liner meeting the standards in sub-subparagraph 62-6.0181(3)(a)1.a., F.A.C.

3. No part of a septic tank and sand-lined drainfield system shall be located within 50 feet of the mean high water line of tidally influenced surface water bodies or within 50 feet of the mean annual flood line of permanent non-tidal surface water bodies.

4. The drainfield component of the system must be located a minimum distance of 50 feet from salt marsh and buttonwood association habitat areas where the dominant vegetation species are those typical of salt marsh communities.

5. The maximum sewage loading rate to the drainfield shall be 0.9 gallons per square foot per day.

(c) A performance-based treatment system designed and certified by a professional engineer, licensed in the state, as producing an effluent meeting at a minimum the treatment standards for a system designed in accordance with subsection 62-6.017(4), F.A.C., and permitted, constructed and monitored in accordance with Part IV.

Rulemaking Authority 381.0065(3)(a), 381.0065(4)(l) FS. Law Implemented 381.0065 FS. History—New 3-3-98, Amended 3-22-00, 4-21-02, 5-24-04, 11-26-06, 7-16-13, Formerly 64E-6.0181.

62-6.0182 Coordinated Permitting.

Chapter 28-20, F.A.C., and the Memorandum Of Understanding (MOU) between Monroe County, the Department of Community Affairs, the Department of Environmental Protection, and the Department of Health, including the Monroe County Health Department, dated July 25, 1997, are herein incorporated by reference, and is available by contacting the Department. Chapter 28-20, F.A.C., and the MOU establish a permit allocation system for development and a coordinated permit review process. Chapter 28-20, F.A.C., and the MOU prohibit new system construction permits to serve new residential development that would allow development in excess of the number of permits that Monroe County may issue under its policy.

Rulemaking Authority 381.0011(4), (13), 381.006, 381.0065(3)(a), (4)(k) FS., Ch. 99-395, LOF. Law Implemented 154.01, 381.0011(4), 381.006(7), 381.0065, 381.00655, 386.01, 386.03, 386.041 FS., Ch. 99-395, LOF. History—New 3-3-98, Amended 3-22-00, Formerly 64E-6.0182.

Part III

Registration of Septic Tank Contractors, Private Provider Inspectors, and Authorization of Partnerships and Corporations

62-6.019 Requirements for Registration.

(1) Persons subject to registration – A person shall be subject to the requirements of this rule if he or she contracts or advertises to provide services to the public or holds himself or herself out as being capable of performing services related to any of the following activities in the onsite sewage treatment and disposal industry regulated by the Department:

(a) Installation of onsite sewage treatment and disposal systems;

(b) Repair of onsite sewage treatment and disposal systems;

(c) Modification of onsite sewage treatment and disposal systems;

(d) Maintenance of onsite sewage treatment and disposal systems;

(e) Septic tank pumping and septage disposal services, excluding companies which only provide portable toilet or temporary

holding tank services;

(f) Abandonment of an onsite sewage treatment and disposal system.

(2) Any person seeking registration shall apply to the Department to take the registration examination on Form DEP 4075, 1/97, Application for Septic Tank Contractor Registration, herein incorporated by reference. The form is available from the Department.

(3) A person shall be eligible to take the registration examination if they submit necessary exhibits and fees and meet the requirements of Section 489.553(4), F.S.

(a) Under the supervision and control of a registered septic tank contractor or a plumbing contractor in Section 489.553(4)(d), F.S., is defined as an employment relationship where compensation can be documented by the regular deduction of FICA and federal withholding tax as required by law. Principal officers of a corporation or partners of a partnership providing onsite sewage contracting services shall be recognized as being under the supervision and control of the corporation's or partnership's qualifying registered septic tank contractor or plumbing contractor.

(b) Related work experience includes but is not limited to onsite sewage treatment and disposal system design, inspection, installation, regulation, environmental health professional certification, site evaluation, underground utility contracting and wastewater treatment plant maintenance and operation. Related work experience does not include clerical, purchasing or estimating.

(c) Out-of-state work experience on a year for year basis shall be accepted for any applicant who demonstrates that they hold a current statewide license for septic tank contracting which was issued upon satisfactory completion of an equivalent examination and required continuing education courses for renewal. For purposes of this section, an equivalent examination means that at a minimum, the following topics were tested and passed: system location and installation; site evaluation criteria; system size determinations; disposal of septage; construction standards for drainfield systems and U.S. Department of Agriculture soil textural classification system. A person employed by and under the supervision and control of such a licensed contractor shall be granted up to two years of related work experience.

(4) Completed applications for registration must be received by the Department's Onsite Sewage Program at least 21 days prior to examination. In order to be complete, the application must have all appropriate spaces filled, be signed by the applicant, be reviewed by the Department where the applicant provides service, include a money order or sufficiently funded check in the correct amount and contain all necessary support documentation. Support documentation shall include:

(a) A list of the 25 most recent contracts by the applicant or business organization completed immediately preceding the date of filing.

(b) Signed statements from two persons not related to the applicant for whom the applicant has provided services in the onsite sewage industry, stating what services were provided.

(c) Certification from a registered septic tank contractor or plumbing contractor of the applicant's employment dates and work responsibilities.

(d) Documentation of payment of federal withholding tax and social security as required by law. For principal corporate officers of a corporation or partners in a partnership, legal documentation of their position in the corporation or partnership may be substituted for withholding tax and social security documentation.

(e) Two recent color passport style photographs, not older than 12 months and 1 1/2" x 1 1/2" inches in size.

(5) Eligible applicants must successfully complete an examination administered by the Department. Minimum passing score for the examination shall be a 75 percent correct response to all questions comprising the exam.

Rulemaking Authority 489.553(3), 489.557(1) FS. Law Implemented 489.552, 489.553 FS. History—New 10-25-88, Amended 3-17-92, 1-3-95, 5-14-96, 2-13-97, Formerly 10D-6.072, Amended 2-3-98, 4-21-02, 6-18-03, 11-26-06, 4-28-10, Formerly 64E-6.019.

62-6.020 Master Septic Tank Contractors.

(1) A septic tank contractor or a plumbing contractor certified under Section 489.105(3)(m), F.S., who is eligible under Sections 489.553(5)(a) and (b), F.S., may apply to the Department on Form DEP 4105, 10/96, Application for Master Septic Tank Contractor Registration, hereby incorporated by reference, to take the master contractor examination provided by the contractor:

(a) Has been in "active" status for the three years immediately preceding the date of application. This time period may not be interrupted by more than 60 accumulated days as "inactive" or include any registration probation or suspension imposed by the Department through administrative action.

(b) Has not been assessed more than \$500.00 in administrative penalties by the Department in the three years immediately preceding the date of application.

(c) Does not have an outstanding fine assessed pursuant to this chapter which is in final order status and judicial reviews are exhausted.

(d) Has successfully resolved any disciplinary action involving septic tank contracting where an administrative action was commenced by the Department prior to the filing of the application.

(e) Has not been convicted of, found guilty of, or entered a plea of nolo contendere to, regardless of adjudication, a crime in any jurisdiction which is related to the practice of contracting for the three years immediately preceding the date of application.

(f) Has successfully completed 30 hours of master contractor course work approved by the Department. At a minimum, this course work shall include training and testing of soil classification, system design and theory, system material and construction standards, and regulatory requirements.

(2) Completed applications for registration must be received by the Department Onsite Sewage Program office at least 21 days prior to examination. In order to be complete, the application must have all appropriate spaces filled, be signed and dated by the applicant, be reviewed by the Department where the applicant's primary place of business is located, and include a money order or sufficiently funded check in the correct amount.

(3) Eligible applicants must successfully complete a comprehensive examination administered by the Department. Minimum passing score for the examination shall be a 70 percent correct response to the examination questions.

(4) Successful applicants shall be issued a master septic tank contractor certificate after they have paid the registration fee.

(5) Master septic tank contractor certificates shall be renewed only after the contractor has completed 18 classroom hours of approved instruction for each renewal cycle. At least 6 classroom hours must be successfully completed in an approved master contractor course. Instructional time spent by a master septic tank contractor in providing Department approved continuing education training shall receive credit as master contractor course hours. Application for renewal shall be made on Form DEP 4076, 01/03, Application for Septic Tank Contractor Registration Renewal, herein incorporated by reference, accompanied by the required supporting documentation and fees.

(a) A master septic tank contractor who only completes 12 classroom hours of approved instruction during the renewal cycle shall revert to registered septic tank contractor status and shall apply for renewal under Rule 62-6.021, F.A.C.

(b) Applications for renewal not submitted in a timely and complete manner shall revert to inactive status. Each application for renewal shall be considered filed in a timely manner if it is postmarked prior to close of business on the date of expiration of the certificate. If that date falls on a weekend or legal holiday, the date of expiration shall be the first working day after the expiration date of the certificate. Application for renewal of an inactive certificate shall be made on Form DEP 4076, Application for Septic Tank Contractor Registration Renewal, accompanied by the required supporting documentation and fees.

(c) The Department shall deny an application for renewal for an outstanding administrative penalty with the Department where the penalty is final agency action and all judicial reviews are exhausted.

(d) Master contractors with "inactive" certificates shall be reinstated to "active" upon completion of the following:

1. Take sufficient continuing education courses and pay registration fees to cover the inactive period, or
2. Retake and pass the comprehensive examination.

(e) Master contractor certificates not renewed within five renewal cycles of the expiration date shall comply with subsections 62-6.020(1) through (4), F.A.C., to be reinstated as active.

(6) All materials incorporated herein may be obtained from the Department of Environmental Protection, Onsite Sewage Program at www.floridadep.gov or 2600 Blair Stone Road, MS #3596, Tallahassee, Florida 32399-2400.

Rulemaking Authority 489.553(3), 489.557(1) FS. Law Implemented 489.552, 489.553, 489.554 FS. History—New 2-13-97, Formerly 10D-6.0725, Amended 2-3-98, 4-21-02, 6-18-03, 11-26-06, Formerly 64E-6.020.

62-6.021 Issuance of Registration Certificates and Renewal.

(1) Certificates of registration shall be renewed only after information has been provided to the Department that the contractor has successfully completed 12 classroom hours of Department-approved instruction within the previous 12-month period. However, if a registered contractor successfully completes more hours of approved instruction than are required for registration renewal within a 12-month period, a maximum of 6 unused hours can be rolled over to renew their next year's certificate of registration. Such information shall be accompanied by necessary renewal fees and a completed renewal application on Form DEP 4076, Application for Septic Tank Contractor Registration Renewal.

(2) Any registration renewal application which for any reason is not submitted in a timely and complete manner shall revert to

inactive status. Each application for renewal shall be considered filed in a timely manner if the application has been postmarked prior to the close of business on the date of expiration of the registration. If that date falls on a weekend or legal holiday, the date of expiration shall be the first working day after the expiration date on the certificate of registration.

(3) A registered contractor may request inactive status. Persons wishing to renew an inactive registration must make application on Form DEP 4076 and substantiate 12 classroom hours of approved instruction for each year the registration was considered inactive. Application must be accompanied by necessary exhibits and renewal fees. Persons holding inactive registrations for more than five renewal cycles from the date of inactivation who wish to become active may not renew the inactive registration but shall seek new registration under Rule 62-6.019, F.A.C.

(4) The Department shall deny an application for renewal if there is any outstanding administrative penalty with the department where the penalty is final agency action and all judicial reviews are exhausted.

(5) Approval of continuing education courses and course providers will be in accordance with the Department Policy on Requirements for Continuing Education Courses and Course Providers, September 2006, (formerly from Department of Health), herein incorporated by reference.

(6) Beginning in 2004 and every 5 years thereafter, registration renewal applications shall include a recent color passport style photograph 1 1/2" x 1 1/2" inches in size and not older than 12 months. The applicant may provide the required photograph as a photographic print or in digital JPEG or TIFF format.

(7) All materials incorporated herein may be obtained from the Department of Environmental Protection, Onsite Sewage Program at www.floridadep.gov or 2600 Blair Stone Road, MS #3596, Tallahassee, Florida 32399-2400.

Rulemaking Authority 489.553(3), 489.557(1) FS. Law Implemented 489.552, 489.553, 489.554 FS. History—New 10-25-88, Amended 3-17-92, 1-3-95, 5-14-96, 2-13-97, Formerly 10D-6.073, Amended 3-22-00, 4-21-02, 6-18-03, 5-24-04, 11-26-06, Formerly 64E-6.021.

62-6.022 Standards of Practice and Disciplinary Guidelines.

(1) It shall be the responsibility of persons registered under this rule to see that work for which they have contracted and which has been performed by them or under their supervision is carried out in conformance with the requirements of all applicable Florida Statutes and Chapter 62-6, F.A.C. The following actions by a person included under this rule shall be deemed unethical and subject to penalties as set forth in this section. The penalties listed shall be used as guidelines in disciplinary cases, absent aggravating or mitigating circumstances and subject to other provisions of this section.

(a) Providing contracted services without obtaining registration from the Department, failure to obtain a certificate of authorization for a firm which provides contracted services, acting under a name not registered or authorized by the department. First violation, letter of warning or fine up to \$500.00; repeat violation, \$500.00 fine, or revocation.

(b) Permit violations.

1. Contractor initiates work to install, modify, or repair a system when no permit has been issued by the Department. A permit is issued after construction is started but prior to completion of the contracted work. No inspections are missed. First violation, letter of warning or fine up to \$500.00; repeat violation, \$500.00 fine and 90 day suspension or revocation.

2. Contracted work is completed without a permit having been issued, or no permit application is received until after contracted work was completed, resulting in missed inspection or inspections. First violation, letter of warning or fine up to \$1,000.00; repeat violation, revocation.

(c) Contracting with a delinquent registration. First violation, letter of warning or fine up to \$500.00; repeat violation, \$500.00 fine or revocation.

(d) Failure to call for required inspections. First violation, letter of warning or fine up to \$500.00; repeat violation, letter of warning or fine up to \$500.00 and 90 day suspension or revocation.

(e) False payment statements which are the result of assessing charges to a customer for work not performed. First violation, letter of warning or fine up to \$500.00; repeat violation, \$500.00 fine and one year suspension or revocation.

(f) Failure to reasonably honor a written warranty. First violation, letter of warning or fine up to \$500.00; repeat violations, \$500.00 fine and one year suspension or revocation.

(g) Abandoning for 30 consecutive days, without good cause, a project in which the contractor is engaged or under contractual obligation to perform. First violation, letter of warning or fine up to \$500.00; repeat violation, revocation.

(h) Aiding or abetting evasion of Chapter 489, F.S. First violation, letter of warning or fine up to \$500.00; repeat violation, \$500.00 fine and one year suspension or revocation.

- (i) Obtaining registration through fraud or misrepresentation. Revocation and \$500.00 fine.
 - (j) Convicted or found guilty of a crime relating to contracting. Use penalty for violation most closely resembling the act underlying the conviction; repeat violation, revocation.
 - (k) Practicing fraud or deceit, making misleading or untrue representations. First violation, letter of warning or fine up to \$500.00; repeat violation, revocation.
 - (l) Gross negligence, incompetence, or misconduct which:
 - 1. Causes no monetary or other harm to a customer, or physical harm to any person. First violation, letter of warning or fine up to \$500.00; repeat violation, \$500.00 fine and 90 day suspension or revocation.
 - 2. Causes monetary or other harm to a customer, or physical harm to any person. First violation, letter of warning or fine up to \$500.00 and 90 day suspension; repeat violation, \$500.00 fine and revocation.
 - (m) Operating a septage disposal service without a valid Department operating permit. First violation, letter of warning or fine up to \$500.00; repeat violation, revocation.
 - (n) Failure to properly treat or properly dispose of septage, holding tank waste, portable restroom waste, or food service sludge. First violation, letter of warning or fine up to \$500.00 per violation of Rule 62-6.010, F.A.C.; repeat violation, revocation.
 - (o) Failure to maintain completed records of septage treatment and disposal activities. First violation, letter of warning or fine up to \$500; repeat violation, \$500.00 fine and 90 day suspension or revocation.
 - (p) Installation, modification, or repair of an onsite sewage treatment and disposal system in violation of the standards of Section 381.0065 or 381.00655, F.S., or Chapter 62-6, F.A.C. First violation, letter of warning or fine up to \$500.00 per specific standard violated; repeat violation, 90 day suspension or revocation.
 - (q) Creation or maintenance of a sanitary nuisance as defined by Section 386.041, F.S. First violation, letter of warning or fine up to \$500.00; repeat violation, 90 day suspension or revocation.
 - (r) Falsifying an inspection report or covering a system in violation of the standards of Rule 62-6.003, F.A.C. First violation, letter of warning or fine up to \$500.00; repeat violation, 90 day suspension of master septic tank contractor privileges or revocation of registration.
 - (s) Performing service on an onsite sewage disposal system that is clearly not necessary to improve the function or design of the system without notifying the property owner that such work is optional. First violation, letter of warning or fine up to \$500.00; repeat violation, \$500.00 fine and one year suspension or revocation.
 - (t) The absence of any violation from this section shall be viewed as an oversight, and shall not be construed as an indication that no penalty is to be assessed.
- (2) Circumstances which shall be considered for the purposes of mitigation or aggravation of penalty shall include the following:
- (a) Monetary or other damage to the registrant's customer, in any way associated with the violation, which damage the registrant has not relieved, as of the time the penalty is to be assessed.
 - (b) Actual job-site violations of this rule or conditions exhibiting gross negligence, incompetence or misconduct by the contractor, which have not been corrected as of the time the penalty is being assessed.
 - (c) The severity of the offense.
 - (d) The danger to the public.
 - (e) The number of repetitions of the offense.
 - (f) The number of complaints filed against the contractor.
 - (g) The length of time the contractor has practiced and registration category.
 - (h) The actual damage, physical or otherwise, to the customer.
 - (i) The effect of the penalty upon the contractor's livelihood.
 - (j) Any efforts at rehabilitation.
 - (k) Any other mitigating or aggravating circumstances.
- (3) As used in this rule, a repeat violation is any violation on which disciplinary action is being taken where the same licensee had previously had disciplinary action taken against him or received a letter of warning in a prior case. This definition applies regardless of the chronological relationship of the violations and regardless of whether the violations are of the same or different subsections of this rule. The penalty given in the above list for repeat violations is intended to apply only to situations where the repeat violation is of a different subsection of this rule than the first violation. Where the repeat violation is the very same type of

violation as the first violation, the penalty set out above will generally be increased over what is shown for repeat violations.

(4) Where several of the above violations shall occur in one or several cases being considered together, the penalties shall normally be cumulative and consecutive.

(5) The provisions of this section shall not be construed so as to prohibit civil action or criminal prosecution as provided in Part III of Chapter 489, F.S., and Section 381.0065, F.S., or for a violation of any provision of Part I of Chapter 386, F.S. No provision of this section shall be construed as to limit the ability of the Department to enter into binding stipulation with the accused party per Section 120.57(4), F.S.

Rulemaking Authority 381.0011(4), (13), 381.0065(3)(a), 489.553(2), (3), 489.556, 489.557 FS. Law Implemented Part III 489 FS. History—New 3-17-92, Amended 1-3-95, 2-13-97, Formerly 10D-6.0751, Amended 2-3-98, 5-24-04, Formerly 64E-6.022.

62-6.023 Certification of Partnerships and Corporations.

(1) Authorization of a corporation is only effective as to that corporation; subsidiaries or parents of authorized corporations must be separately authorized.

(a) Application for a certificate of authorization shall be made to the Department on Form DEP 4077, 04/03, Application for Certificate of Authorization, herein incorporated by reference, and shall be accompanied by all necessary exhibits and fees. A business that applies for a certificate of authorization after the mid point of the biennial authorization cycle shall pay one-half the fee required in Rule 62-6.030, F.A.C.

(b) Any certificate of authorization not renewed in a timely manner shall expire. Applications for renewal shall be considered timely filed if the application has been post marked prior to the close of business on the date of expiration of the certificate. If that date falls on a weekend or legal holiday, the day of expiration shall be the first working day after the expiration date of the certificate.

(2) A registered contractor may not be the sole qualifying contractor for more than one business required to have a certificate of authorization.

(3) A business organization which loses its qualifying contractor shall have sixty (60) days from the date the qualifier terminated his affiliation within which to obtain another qualifying person. This period shall be extended by the Department for a period of 30 days pending the outcome of the examination if the applicant has provided a completed application and all required exhibits and fees. During this period, the business organization may complete any existing contracts or continuing contracts, but may not undertake new contracts.

(4) A business organization shall provide written notification to the Department within 30 days of any change in the ownership of the business.

(5) A business organization that changes its name shall apply for a new certificate of authorization within 30 days of the name change.

(6) All materials incorporated herein may be obtained from the Onsite Sewage Program at www.floridadep.gov or Department of Environmental Protection, Onsite Sewage Program at www.floridadep.gov or 2600 Blair Stone Road, MS #3596, Tallahassee, Florida 32399-2400.

Rulemaking Authority 381.0065, 489.553, 489.557 FS. Law Implemented 381.0065, Part III 489 FS. History—New 10-25-88, Amended 3-17-92, 1-3-95, 5-14-96, 2-13-97, Formerly 10D-6.076, Amended 4-21-02, 5-24-04, 6-25-09, 4-28-10, Formerly 64E-6.023.

Part IV

Performance-based Treatment Systems

62-6.025 Definitions.

Definitions in Chapter 62-6, Parts I and II, F.A.C., are also applicable to Chapter 62-6, Part IV, F.A.C.

(1) Composite sample – a defined mixture of grab samples of wastewater or effluent taken in proportion to either time or flow.

(2) Disposal component – arrangement of equipment and/or materials that distributes effluent within a drainfield.

(3) Effluent – the recovered water product from a sampling point following the final design treatment step.

(4) Failure – as in subsection 62-6.002(23), F.A.C., including non-compliance with applicable treatment performance standards as defined in paragraph 62-6.025(11)(e), F.A.C., unless the maintenance entity performs and documents maintenance after a sampling event, undertakes a second sampling event within 30 days of the first, and the results of which meet the applicable

treatment performance standard.

(5) Grab sample – a sample which is taken from wastewater or effluent over a period of time not to exceed fifteen minutes.

(6) Effective storage volume – fillable volume in the drainfield material within the vertical distance from the bottom of the drainfield to the invert of the distribution pipe.

(7) Performance-based treatment system – a specialized onsite sewage treatment and disposal system designed by a professional engineer with a background in wastewater engineering, licensed in the state of Florida, using appropriate application of sound engineering principles to achieve specified levels of CBOD₅ (carbonaceous biochemical oxygen demand after five days), TSS (total suspended solids), TN (total nitrogen), TP (total phosphorus), or fecal coliform found in domestic or commercial sewage waste, to a specific and measurable established performance standard.

(a) Treatment components which have already been approved as meeting the requirements of subsection 62-6.012(1), F.A.C., are not required to obtain an Innovative System Permit to be approved as a component of a performance-based treatment system. The manufacturer must request such approval from the Onsite Sewage Program in writing. When proposed as part of a performance-based treatment system, the treatment component's proposed performance must not exceed the following:

1. For CBOD₅ and TSS, the average effluent concentration as reported by the applicable NSF 40 standard testing completion report, or corresponding results of an NSF 245 or NSF 350 testing completion report.

2. For TN, the average performance expressed as percent removal reported in the applicable NSF 245 standard testing completion report.

3. For fecal coliform, the performance expressed as percent removal for E. coli based on average influent and effluent concentrations reported in the applicable NSF 350 testing completion report.

(8) Performance-based treatment system maintenance entity – any person or business entity which has obtained an annual permit issued on Form DEP 4013, effective 06-21-2022, Operating Permit, adopted and incorporated by reference in subsection 62-6.012(4), F.A.C., at <https://www.flrules.org/Gateway/reference.asp?No=Ref-14365> from the Department of Health, county health department in the county where the maintenance entity is located.

(9) Total storage volume – the fillable volume from the bottom of the drainfield material to the top of the drainfield.

(10) Treatment component – any arrangement of equipment and/or material that treats sewage. A treatment component may coexist within or after a disposal component.

(11) Treatment performance standards.

(a) Applications for performance-based treatment system construction permits after the effective date of this rule must include performance standards consisting of the following three criteria:

1. Annual average concentration is the arithmetic mean of the results of all effluent samples taken within the previous 365 days, expressed as a concentration.

2. Individual sample – result of analysis of one effluent sample, whether grab sample or composite sample, expressed as a concentration. If samples are taken from multiple sample points at the same sampling event, the highest concentration sample must be used.

3. Percent removal – removal of a pollutant from the discharge of the treatment system compared to the influent from the establishment based on annual averages of both. The calculation percent removal = $(1 - \text{annual average effluent concentration} / \text{annual average influent concentration}) * 100$.

(b) Treatment performance standards are established for five pollutants.

1. Carbonaceous biochemical oxygen demand after five days (CBOD₅), measured in mg oxygen per liter

2. Total suspended solids (TSS), measured in mg per liter

3. Total nitrogen (TN), the sum of nitrite, nitrate and total Kjeldahl nitrogen, measured in mg nitrogen per liter

4. Total phosphorus (TP), measured in mg phosphorus per liter

5. Fecal coliform, measured in colony forming units (cfu) or most probable number (MPN) per 100 mL

(c) For treatment performance standards other than domestic baseline treatment standards, in lieu of measured influent values, the following annual average design influent values may be assumed: 200 mg/L for CBOD₅, 200 mg/L for TSS, 60 mg/L for TN, 10 mg/L for TP, 2,000,000 CFU/100 mL for fecal coliform.

(d) Numerical values for domestic sewage waste, domestic baseline septic tank effluent and several levels of common treatment performance standards for the five pollutants are defined in Table IXa and IXb. In the system construction application, the engineer must design the system to meet average annual concentrations for all applicable pollutants except for total nitrogen, for which

percent removal must be used. The site-specific application may propose to use soil or a disposal component as part of the treatment system for secondary and advanced secondary treatment systems, in which case treatment concentration standards must be decreased by 90 percent for CBOD₅, and TSS, by 99% for fecal coliform, and by 30% for TN, and TP, as shown in Table IXb.

(e) Compliance during monitoring must consist of meeting at least two of the three criteria. To achieve compliance the values determined from samples of the system must be equal to or better than the treatment standards listed. For concentrations, better means lower, for percent removal, better means higher.

TABLE IXa BASELINE TREATMENT STANDARDS			
POLLUTANT	Domestic Sewage Waste Range	Domestic Baseline Septic Tank Effluent Standards	Domestic Baseline Soil Treatment Standard 24" Below Absorption Surface
CBOD ₅ (mg/L)			
-annual average	300	240	10
-individual sample	500	360	20
-removal	NA*	NA	95%
TSS (mg/L)			
-annual average	200	100	10
-individual sample	500	150	15
-removal	NA	NA	90%
TN (mg/L)			
-annual average	100	100	70
-individual sample	150	150	100
-removal	NA	NA	30%
TP (mg/L)			
-annual average	18	18	12
-individual sample	25	25	18
-removal	NA	NA	30%
Fecal coliform (cfu or MPN/100ml)			
-annual average	2.00E+06	2.00E+06	20
-individual sample	2.00E+07	2.00E+07	200
-percent reduction	NA	NA	99.999%

TABLE IXb PERFORMANCE-BASED TREATMENT SYSTEM STANDARDS									
POLLUTANT	Design Influent Value	Aerobic Treatment Unit Standards NSF40	Aerobic Treatment Unit Standards NSF245	Secondary Treatment Standards	Secondary Treatment with Soil Treatment	Advanced Secondary Treatment Standards	Advanced Secondary Treatment with Soil Treatment	Florida Keys Nutrient Reduction Standards	Advanced Wastewater Treatment Standards
CBOD ₅ (mg/L)									
-annual average	200	20	20	20	2	10	1	10	5
-individual		60	60	60	6	30	3	30	10

sample									
-removal		90%	90%	90%	99%	95%	99.5%	95%	97%
TSS (mg/L)									
-annual average	200	20	20	20	2	10	1	10	5
-individual sample		60	60	60	6	30	3	30	10
-removal		90%	90%	90%	99%	95%	99.5%	95%	97%
TN (mg/L)									
-annual average	60	NR**	30	NR		30	21	10	3
-individual sample			50			50	35	40	6
-removal			50%			50%	65%	70%	95%
TP (mg/L)									
-annual average	10	NR	NR	NR		10	7	1	1
-individual sample						20	14	4	2
-removal						0	30%	80%	90%
Fecal coliform (cfu or MPN/100ml)									
-annual average	2.00E+06	NR	NR	200	2	200	2	NR (Footnote 3)	1
-individual sample				800	8	800	8		25
-percent reduction				99.99%	99.9999%	99.99%	99.9999%		99.9999%

* NA = Not applicable

** NR = No requirement

Footnote 1. Where chlorine is used for disinfection in a system designed to meet advanced wastewater treatment standard for fecal coliform the design must include provisions for rapid and uniform mixing; and the total chlorine residual of at least 1.0 mg/l must be maintained at all times. The minimum acceptable contact time must be 15 minutes at the peak hourly flow. No individual sample must exceed 5 mg/L TSS after the last treatment step before application of the disinfectant.

Footnote 2. Where chlorine is used for disinfection in a system designed to meet either the secondary treatment standard or the advanced secondary treatment standard for fecal coliform, the design must include provisions for rapid and uniform mixing and a total chlorine residual of at least 0.5 mg/l must be maintained after at least 15 minutes contact time at the peak hourly flow.

Footnote 3. Where discharge is to an injection well, disinfection must meet the requirements for advanced secondary treatment standards.

Footnote 4. Performance-based treatment systems (PBTS) designed to meet Aerobic Treatment Unit (ATU) standards may be permitted where ATUs are required, for example by county or city ordinance. An ATU not permitted as a component of a PBTS must comply with Rule 62-6.012, F.A.C.

(12)Wastewater strength – the sum of the CBOD₅ and TSS concentrations.

Rulemaking Authority 381.0011(4), (13), 381.0065(3)(a), 381.0065(4)(e) FS. Law Implemented 381.0065, 381.0067, 386.041 FS. History—New 2-3-98, Amended 3-22-00, 6-18-03, 11-26-06, Formerly 64E-6.025, Amended 6-21-22.

62-6.026 Applications for Innovative System Permits and System Construction Permits.

(1) Applications for innovative system permits – Applications for innovative system permits shall be made using form DEP

3143. The application and all supporting information shall be signed, dated and sealed by an engineer, licensed in the State of Florida. Except as provided for in subsection 62-6.028(3), F.A.C., alternative drainfield materials and designs shall not be approved which would result in a reduction in drainfield size using the mineral aggregate drainfield system as described in Rule 62-6.014, F.A.C., and the total surface area of soil at the bottom of the drainfield as the criteria for drainfield sizing comparisons. Applications shall include:

(a) A monitoring protocol designed to validate that the system will perform to the engineer's design specifications.
(b) Compelling evidence that the system will function properly and reliably to meet the requirements of this chapter and Section 381.0065, F.S. Such compelling evidence shall include one or more of the following from a third-party testing organization approved through the NSF Environmental Technology Verification Program:

1. Side stream testing, where effluent is discharged into a system regulated pursuant to Chapter 403, F.S.
2. Testing of systems in other states with similar soils and climates.
3. Laboratory testing.

(2) Applications for system construction permits – All information required in Part I for an application for system construction permit shall be included as part of the application for a performance-based treatment system. Two copies of all information shall be dated, signed and sealed by the registered engineer who designed the system, and provided to the Department. Upon any change to the design, two copies of any revisions shall be provided to the Department. Additional information shall include the following:

(a) System design criteria, to include performance levels for the performance-based system and monitoring requirements and monitoring locations, and method of monitoring flow through the system. Performance levels shall be indicated in the design as secondary treatment standards, advanced secondary treatment standards, or advanced wastewater treatment standards, or baseline treatment.

(b) System design calculations for the performance-based system.

(c) System design plans and drawings for the performance-based treatment system, to include all components and method of installation to be used in construction. A detailed installation drawing shall be included. The site plan required in paragraph 62-6.004(3)(a), F.A.C., shall be drawn to scale.

(d) Where soil is used as part of the treatment system, a site plan showing the direction of groundwater movement, the locations of all effluent plume monitoring wells or devices, and the anticipated extent of the effluent plume.

(e) Contingency plan for effluent to be collected and disposed of, or treated, in the event of system failure.

(f) Certification of design. The design engineer shall certify the design of the system to meet all applicable performance standards. The certification shall be as follows: "I certify that the engineering features of this performance-based treatment system have been designed or specified by me and conform to engineering principles applicable to such projects. In my professional judgment, this system, when properly constructed, operated and maintained, will achieve the established performance standard and comply with all applicable statutes of the State of Florida and rules of the Department."

(g) An operation and maintenance manual shall be prepared by the design engineer and provided as part of the original design.

(h) All changes to the engineering specifications shall be approved and certified by the design engineer. A copy of any changes shall be provided to the Department for review for compliance with performance-based system standards and approval or disapproval.

(i) All changes to the operation and maintenance manual shall be approved and certified by the design engineer. A copy of any changes shall be provided to the Department for review and approval or disapproval.

(j) A cover letter addressed to the Department stating that the applicant wishes to apply for a performance-based treatment system.

(3) All materials incorporated herein may be obtained from the Department of Environmental Protection, Onsite Sewage Program at www.floridadep.gov or 2600 Blair Stone Road, MS #3596, Tallahassee, Florida 32399-2400.

Rulemaking Authority 381.0011(4), (13), 381.0065(3)(a) FS. Law Implemented 381.0065, 381.0067, Part I 386 FS. History—New 2-3-98, Amended 6-18-03, 11-26-06, 4-28-10, Formerly 64E-6.026.

62-6.027 Permits and Inspections.

(1) Innovative System Permit – An application for system construction permit for an innovative system cannot be reviewed until the innovative system permit has been approved specifying the number of systems and time limits. The Department's decision to grant or deny the innovative system permit shall be based on the presence or absence of compelling evidence that the innovative

systems will function properly and reliably to meet the requirements of this chapter and Section 381.0065, F.S.

(2) System Construction Permit – No portion of a performance-based treatment system shall be installed, repaired, altered, modified, abandoned or replaced until a construction permit has been issued on Form DEP 4016. If building construction has commenced, the system construction permit shall be valid for an additional 90 days beyond the eighteen month expiration date. A fee shall be charged for a repair permit issued within 12 months from the date of final authorization of the performance-based treatment system. If a construction or repair permit for a performance-based treatment system is transferred to another person, the date of the construction or repair permit shall not be amended, but shall run from the date of original issuance prior to the transfer. Servicing or replacing with like kind mechanical or electrical parts of a performance-based treatment system; pumping of septage from a system; or making minor structural corrections to a tank, or distribution box, does not constitute a repair, however, all services must be performed by the performance system maintenance entity. Any proposed change from the original design, including increasing or decreasing changes in flow rate, shall require that the system be re-engineered to achieve the desired performance standard under the altered conditions.

(3) Within 15 working days after the Department receives a completed application for a performance-based treatment system, the Department must either issue a permit for the system or shall notify the applicant that the system does not comply with the performance criteria, and refer the application to the Onsite Sewage Program, who shall review the application for a determination whether the system should be approved, disapproved, or approved with modifications. The determination of the engineer for the Onsite Sewage Program shall prevail over the action of the local county health department. All applications for a construction permit for an innovative system shall be reviewed for completeness by the Department and referred to the Onsite Sewage Program for review and approval, disapproval or approval with modifications.

(4) The applicant shall be notified of the Department's determination. If the permit is denied, the applicant shall be notified of their right to pursue a variance or seek review under the provisions of Chapter 120, F.S.

(5) System inspection – Before covering with earth and before placing the performance-based treatment system into service, a person installing or constructing any portion of the performance-based treatment system shall notify the Department of the completion of the construction activities and shall have the system inspected by the Department.

(a) Prior to or concurrent with a final installation inspection by the Department, the professional engineer who designed the system, or the design engineer's designee, shall inspect the entire installation and the engineer shall certify in writing that the installed system complies with the approved design and installation requirements. This certification shall read as follows: "I certify that the engineering features of this performance-based treatment system as installed have been examined by me and found to comply with all specifications contained in the engineering design that was the basis for issuance of the construction permit. I certify that the required components are installed for the system to function as permitted and designed. I certify that the operation and maintenance manual for this performance-based treatment system has been prepared or examined by me or by an individual(s) under my direct supervision and that there is reasonable assurance, in my professional judgment, that the system, when properly operated and maintained in accordance with this manual, will achieve the established performance standard and comply with all applicable statutory requirements and rules of the Department."

(b) The design engineer must provide a signed, sealed, and dated detailed installation drawing, to depict the installation as built, to the Department prior to final installation approval.

(c) If the system is found to not comply with the construction permit during the construction inspection on any type of system installation, the Department shall notify the engineer. The installer shall make all required corrections and notify the Department of the completion of the work prior to reinspection of the system. A reinspection fee shall be charged for each additional inspection leading up to construction approval.

(d) Final installation approval will not be issued until the Department has confirmed:

1. Receipt of the engineer's certification as required in paragraph 62-6.027(5)(a), F.A.C., and the as-built drawing as required in paragraph 62-6.027(5)(b), F.A.C., indicating that all requirements for installation of the performance-based treatment system have been completed in compliance with the system construction permit,

2. Other system construction requirements, as reviewed during a system construction inspection, are in compliance with the permit, and the plans and specifications provided with the permit application, including building construction and lot grading,

3. The system maintenance entity has been identified to the Department, and

4. That the property owner has executed and recorded in the public property records at the county courthouse, a written notice that informs all subsequent property owners of the use of the performance-based treatment system, and of the requirement for the

system to be maintained, in perpetuity, in compliance with all lawful requirements.

(e) Issuance of a final installation approval does not imply that a system will perform satisfactorily for a specific period of time.

(6) Operating permits – No residence or establishment served by a performance-based treatment system shall be occupied until Form DEP 4081, “Application for Onsite Sewage Treatment and Disposal System Operating Permit” has been received and approved by the Department. Where a performance-based treatment system is used, only one operating permit shall be required for the system.

(a) Maintenance entities contracting to service performance-based treatment systems shall obtain a biennial operating permit from the Department for the system. Persons operating a performance-based treatment system shall permit Department personnel right of entry to the property during normal working hours to allow for effluent sampling or evaluating the general state of repair or function of the system.

(b) The permit shall designate the performance system maintenance entity responsible for the operation and maintenance of the system. At a minimum, the performance system maintenance entity responsible for maintenance of the system shall test, or cause to be tested, the performance-based treatment system in accordance with Part IV of this rule. The frequency of testing shall be specified on the biennial operating permit. The operating permit shall also specify the observation interval to assess the operation of the system without taking monitoring samples.

(c) Systems and the structures which they serve shall be inspected by the Department at least once annually during the term of the biennial operating permit to determine compliance with the terms of the operating permit.

(d) A copy of the signed maintenance agreement between the property owner or property lessee and an engineer-designed performance-based system maintenance entity shall be provided to the Department by the maintenance entity. The maintenance agreement shall:

1. Initially be for a period of at least 2 years and subsequent maintenance agreement renewals shall be for at least 1 year periods for the life of the system.

2. Provide that a maintenance entity which desires to discontinue the provision of maintenance services, notify in writing, the property owners and lessees and the Department at least 60 days prior to discontinuance of service.

3. Provide that, if a private maintenance entity discontinues business, property owners who have previously contracted with the discontinued maintenance service shall, within 60 days of the service termination date, contract with an approved maintenance service and provide the Department a copy of the newly signed maintenance agreement.

4. Provide that each performance-based treatment system is inspected by an engineer-designed performance-based system maintenance entity at least two times each year. The maintenance entity shall furnish to the Department a listing of all performance-based treatment systems inspected or serviced during the respective reporting period. As a minimum, reports shall indicate the system owner or building lessee, the street address of the system, the date of system inspection or service and a statement as to the maintenance or service performed. The maintenance entity shall also include a list of the owners who have refused to renew their maintenance agreement.

(e) No performance-based treatment system shall be serviced or repaired by a person or entity engaged in a performance-based treatment system maintenance service until the service entity has obtained an annual written permit issued on Form DEP 4013 from the Department in the county where the service company is located. Each service entity shall employ at least one plumbing contractor licensed under Section 489.105(3)(m), F.S., septic tank contractor registered under Part III of Chapter 489, F.S., or a state-licensed wastewater treatment plant operator, who is responsible for maintenance and repair of all systems under contract. Application for a Maintenance Service Permit, Form DEP 4066, shall be made to the Department and shall contain the following information:

1. Evidence that the maintenance entity possesses a manufacturer’s maintenance and operations manual and has received training from the manufacturer in proper installation and service of the performance-based treatment system components and has received written approval from the components’ manufacturers to perform service on their components. The manual shall contain detailed instructions on proper operation and maintenance procedures, a replacement parts list for all components being installed and maintained, a statement giving the capabilities of each system, instructions on how to detect a malfunctioning system and what to expect from a properly functioning system.

2. A signed statement from the applicant attesting that the applicant has adequate staff, possesses proper equipment and has sufficient spare structural and mechanical parts and components to perform routine system monitoring and servicing and is able to make a service response within 36 hours after notification of the need for emergency repairs.

3. Payment of \$25.00 to the Department per annum for the performance-based treatment system maintenance service permit.

(7) All materials incorporated herein may be obtained from the Department of Environmental Protection, Onsite Sewage Program at www.floridadep.gov or 2600 Blair Stone Road, MS #3596, Tallahassee, Florida 32399-2400.

Rulemaking Authority 381.0065(3)(a) FS. Law Implemented 381.0065, Part I 386 FS. History—New 2-3-98, Amended 4-21-02, 6-18-03, 6-25-09, 4-28-10, Formerly 64E-6.027, Amended 8-27-24.

62-6.028 Location and Installation.

Performance-based treatment systems shall be installed in compliance with the following.

(1) Systems shall receive the following setbacks to the listed feature. If no setback is specified for a specific feature, Part I requirements shall apply unless the performance-based treatment system is located in the Florida Keys. If located in the Florida Keys, Part II shall be used for all setbacks.

(a) Secondary Treatment Standards. The system shall be a minimum of 65 feet from any surface water bodies or wet retention or detention area if the lot was platted on or after January 1, 1972.

(b) Advanced Secondary Treatment Standards.

1. Surface water bodies: The system shall be a minimum of 50 feet from any surface water bodies or wet retention or detention area if the lot was platted on or after January 1, 1972.

2. Groundwater interceptor drain: 10 feet.

3. Dry retention area and swales: 10 feet.

4. Where a performance-based treatment system is placed adjacent to Class II waters, setbacks that are applied to secondary treatment levels shall be applicable. Alternatively, where the fecal coliform complies with the following levels, reduced setbacks in subparagraphs 62-6.028(1)(b)1. through 3., F.A.C., above, shall be allowed.

a. System operation shall result in not more than 14 fecal coliform colonies per 100 ml of effluent sample. Where chlorine is used for disinfection, the design shall include provisions for rapid and uniform mixing and a total chlorine residual of at least 1.0 mg/l shall be maintained after at least 15 minutes contact time at the peak hourly flow. To determine compliance of a system, the following operational criteria (using either MF or MPN methods) are applicable.

b. The arithmetic mean of the fecal coliform colonies collected during the annual period shall not exceed 14 per 100 ml of effluent.

c. The median value of the fecal coliform colonies for a minimum number of 10 samples of effluent, each collected on a separate day during a period of 30 days (monthly) shall not exceed 14 per 100 ml of sample.

d. No more than 10% of the samples collected during the period of 30 consecutive days shall exceed 43 fecal coliform colonies per 100 ml of sample.

e. Any one sample shall not exceed 86 fecal coliform colonies per 100 ml of sample.

(c) Advanced Wastewater Treatment Standards.

1. Surface water bodies: The drainfield shall be a minimum of 25' feet from any surface water bodies or wet retention or detention area. The treatment unit or process containers shall be a minimum of 50' feet from any surface water bodies or wet retention or detention area.

2. Groundwater interceptor drain: 10' feet.

3. Dry retention area and swales: 10' feet.

4. Seasonal high water table to bottom of drainfield: 12" inches.

(2) Systems designed to meet secondary treatment standards shall be allowed to exceed their authorized lot sewage flow allowances by up to 25%. Systems designed to meet advanced secondary treatment standards shall be allowed to exceed their authorized lot sewage flow allowances by up to 50%. Systems designed to meet advanced wastewater treatment standards shall be allowed to exceed their authorized lot sewage flow allowance by up to 100%. For example, if authorized lot flow is 200 gallons per day, a total of 300 gallons per day lot flow will be allowed for systems designed to meet advanced secondary treatment standards.

(3) Hydraulic surge storage – the design shall protect the residence from backflow into the treatment tank. For gravity and pumped systems, the following shall apply:

(a) For aggregate systems, the porosity shall be calculated at 33%.

(b) The effective storage volume of the drainfield shall be equal to or greater than 1.5 times the design daily flow.

(c) The total storage volume of the drainfield shall be equal to or greater than 1.8 times the design daily flow.

(4) Infiltrative surface area reductions shall be allowed for systems designed to reduce the wastewater strength of the effluent where the drainfield is sized based on slightly limited soils. The baseline system shall be used for comparison with a typical average CBOD₅ of 140 mg/l and TSS of 105 mg/l. The maximum reduction in infiltrative surface area shall not exceed the following standards.

- (a) Secondary treatment standards: 25% reduction.
- (b) Advanced secondary treatment standards: 40%.
- (c) Advanced wastewater treatment standards: 40%.

Rulemaking Authority 381.0065(3)(a) FS. Law Implemented 381.0065, 386.041 FS. History—New 2-3-98, Amended 3-22-00, 6-25-09, 7-16-13, Formerly 64E-6.028.

62-6.029 Monitoring.

Monitoring requirements – All performance-based treatment systems shall be monitored in compliance with the requirements in this section. If soil is considered part of the treatment system in any performance-based standard, monitoring points in the effluent plume within the boundaries of the property must be in compliance with the minimum criteria for total nitrogen, total phosphorous and fecal coliform.

(1) Advanced wastewater treatment systems.

(a) A maintenance report shall be kept by the performance system maintenance entity. A copy of all maintenance reports shall be provided to the Department on monthly intervals, to begin one month after system operation has started. After the first six reports are provided to the Department, reports shall be provided once every three months. All reports must be legible. The report shall include the following information:

1. Address of performance-based treatment system.
2. Date and time of inspection.
3. Sample collection time and date, and person who collected sample.
4. Results of all sampling.
5. Volume of effluent treated, to include total monthly and daily average.
6. Maintenance performed.
7. Problems noted with performance-based treatment system and actions taken or proposed to overcome them.

8. During the first six months of system operation, or after the system has failed, systems shall be monitored a minimum of once every two weeks. Monitoring shall include sampling for CBOD₅, TSS, TN, TP and fecal coliform. Monitoring shall occur at the time the system is expected to be at capacity, or as close to capacity as possible. Re-sampling within 48 hours of receipt of laboratory results shall be allowed on all samples that exceed design parameters in order to evaluate the validity of the original sample results. If the re-sample is in compliance with the appropriate performance-based standard, the original result shall be disregarded. Laboratories must be approved by the Department for all analyses performed. All results shall be certified by the laboratory.

a. If any two consecutive samples exceed design treatment standards by more than 100%, the system design and operation shall be inspected by the design engineer for conformance with permitting requirements, and shall be adjusted to bring the effluent quality into compliance with permitting requirements. Monitoring shall be increased to once per week, or more if the design engineer specifies such, until such time the violation is corrected. When two consecutive samples are within 100% of the design parameters, monitoring shall be reduced to once every two weeks. For example, if the design parameter is 10 mg/l CBOD₅, a reading of 20 mg/l CBOD₅ exceeds the standard by 100%.

b. After a six month period of compliance with all applicable performance standards, sampling shall be performed quarterly.

c. When an applicant installs a system designed to meet advanced wastewater treatment standards, the monitoring frequency shall be reduced by 50% if only one of the following three location and installation requirements is used and the other two remain at the standards required of prescriptive systems. The three requirements are:

- (I) Setbacks required in paragraphs 62-6.028(1)(a)-(c), F.A.C.
- (II) Seasonal high water table subparagraph 62-6.028(1)(c)4., F.A.C.
- (III) Authorized lot flow subsection 62-6.028(2), F.A.C.

(b) When four consecutive once every two week samples from a system are at or below the applicable standard, sampling frequency shall be reduced to quarterly.

(c) When eight consecutive quarterly samples from a system are below the applicable standard, sampling frequency shall be

reduced to once every six months.

(d) All reports of operating permit violations shall be reported to the Department within five working days.

(e) If the system cannot be brought into compliance with design parameters, the contingency plan must be enforced.

(f) All failures of the performance-based treatment system shall be reported to the Department by the maintenance entity within one working day from discovery of failure. The testing laboratory shall mail copies of all results to the Department.

(g) Testing performed during periods of system non-use that exceed one week, shall not qualify as legitimate samples for purposes of compliance with any provisions of this rule.

(2) Secondary treatment systems and advanced secondary treatment systems.

(a) A maintenance report shall be kept by the performance system maintenance entity. A copy of all maintenance reports shall be provided to the Department on quarterly intervals. All reports must be legible. The report shall include the items required in subparagraphs 62-6.029(1)(a)1., 2., 5., 6. and 7., F.A.C., in addition to the following information:

1. Ponding depth observed through drainfield observation ports or, when the drainfield design prevents direct measurement of ponding depth, CBOD₅ and TSS results for samples collected at a point prior to the discharge to the drainfield.

2. If system performance is necessitated by setback reductions or lot flow allowances:

a. Sampling results for Fecal Coliform from Secondary Treatment Systems.

b. Sampling results for Nitrogen, Phosphorous and Fecal Coliform from Advanced Secondary Treatment Systems.

c. Collection time and date of all samples.

d. Name of the person who collected samples.

(b) All reports of operating permit violations shall be reported to the Department within five working days.

(c) If the system cannot be brought into compliance with design parameters, the contingency plan must be implemented by the system owner.

(d) All failures of the performance-based treatment system shall be reported to the Department by the maintenance entity within one working day from discovery of failure. The testing laboratory shall mail copies of all results to the Department.

(3) Florida Keys nutrient reduction treatment systems shall be monitored and sampled in accordance with Part II of this chapter.

(4) All systems with drainfields designed under subsections 62-6.028(3)-(5), F.A.C., shall be monitored via placing a minimum of two observation ports in the drainfield. Monitoring will consist of recording depth of effluent ponding in the drainfield in at least two places on a quarterly basis.

(5) If soil is considered part of the treatment system in any performance-based standard, two monitoring points in the effluent plume within the boundaries of the property must be in compliance with the performance level specified by the design engineer.

(6) Any performance-based treatment system that is out of compliance with the terms of the operating permit shall be re-engineered by an engineer registered in the State of Florida. The system shall be brought into compliance with treatment standards required at the time of system permitting.

(7) Innovative systems shall be monitored in accordance with the design engineer's protocol submitted with the application as approved by the Department. All monitoring and sampling shall be performed at the expense of the applicant. At a minimum, the monitoring protocol shall:

(a) Determine if baseline standards are being met.

(b) Address the monitoring for any contaminant being reduced.

(c) Address the monitoring of any site condition being modified.

(8) The following shall be considered as violations of the performance-based treatment system operating permit:

(a) The failure to maintain equipment in a condition which will enable the intended function.

(b) The submission, by the owner, manager or maintenance entity of a performance-based treatment system, or agent or employee thereof, of misleading, false, or inaccurate information or operational reports to the Department, either knowingly or through neglect.

(c) The submission of fraudulent data produced with an intention to deceive including the following:

1. Apparent measurement results for which no measurement or test results were actually made as determined by the absence of the supporting records which are usually made.

2. Measurements or test results obtained by deliberately and knowingly making measurements or collecting samples at places and times other than as specified in this chapter.

3. Test results obtained through use of unapproved and erroneous sampling, preservation, storage, or analysis procedures.

4. Computational errors, misunderstandings of required procedures and other common errors are excluded.

Rulemaking Authority 381.0011(13), 381.006, 381.0065(3)(a) FS. Law Implemented 381.0065, 381.0067, 386.041 FS. History—New 2-3-98, Amended 3-22-00, 6-18-03, Formerly 64E-6.029.

62-6.0295 Innovative System Reclassification.

(1) Following the installation and monitoring of the number of systems allowed by the innovative system permit, the applicant may request reclassification of their innovative system by the Onsite Sewage Program. Requests for reclassification as an alternative system component and design shall be made in accordance with subsection 62-6.009(7), F.A.C. Requests for reclassification as a performance-based treatment system shall include the following:

- (a) Results and analysis of monitoring of the systems installed.
- (b) Observations of system performance.
- (c) Maintenance, repairs or modifications performed on any systems.
- (d) Comments from the system operators or users.
- (e) Comments from the design engineers who designed the individual system designs.
- (f) Comments from the Department in the counties where the systems were installed.
- (g) Specification of the proposed classification as performance-based.
- (h) Rationale for the proposed type of classification desired.
- (i) Proposed monitoring protocol.
- (j) A sample manual addressing the siting, design, installation, inspection, operation, maintenance and abandonment procedures.

(2) The Onsite Sewage Program shall process the request in accordance with Chapter 120, F.S. The Department shall approve the request only if the Department is satisfied that the system will reliably perform to the standards desired under normal operating conditions as demonstrated by the information provided.

Rulemaking Authority 381.0011(13), 381.006, 381.0065(3)(a) FS. Law Implemented 381.0065, 381.0067, 386.041 FS. History—New 6-18-03, Formerly 64E-6.0295.

Part V Fees for Services

62-6.030 Fees.

(1) The following fees are required for services provided by the Department.

(a) Application and plan review for construction permit for new system.	\$100.00
(b) Application and approval for existing system, if system inspection is not required.	\$35.00
(c) Application and Existing System Evaluation.	\$50.00
(d) Application for permitting of a new performance-based treatment system.	\$125.00
(e) Site evaluation.	\$115.00
(f) Site re-evaluation.	\$50.00
(g) Permit or permit amendment for new system, modification or repair to system.	\$55.00
(h) Research/Training surcharge, new and repair permits.	\$5.00
(i) Initial system inspection.	\$75.00
(j) System reinspection (stabilization, non-compliance or other inspection after the initial inspection).	\$50.00
(k) Application for system abandonment permit, includes permit issuance and inspection.	\$50.00
(l) Annual operating permit industrial/manufacturing zoning or commercial sewage waste.	\$150.00
(m) Biennial operating permit for aerobic treatment unit or performance-based treatment system.	\$100.00
(n) Amendment to operating permit.	\$50.00
(o) Tank Manufacturer's Inspection per annum.	\$100.00
(p) Septage Disposal Service permit per annum.	\$75.00
(q) Portable or Temporary Toilet Service permit per annum.	\$75.00
(r) Additional charge per pumpout vehicle, septage disposal service or portable toilet service.	\$35.00

(s) Septage stabilization facility inspection fee per annum per facility.	\$150.00
(t) Septage disposal site evaluation fee per annum.	\$200.00
(u) Aerobic treatment unit maintenance entity permit per annum.	\$25.00
(v) Variance Application for a single family residence per each lot or building site.	\$200.00
(w) Variance Application for a multi-family or commercial building per each building site.	\$300.00
(x) Application for innovative product approval.	\$2,500.00

(2) The following fees are required to accompany applications for registration of individuals for septic tank contractor or master septic tank contractor or for a certificate of authorization for partnerships and corporations.

(a) Application for registration including examination.	\$75.00
(b) Initial registration.	\$100.00
(c) Renewal of registration.	\$100.00
(d) Certificate of authorization each two-year period.	\$250.00

Rulemaking Authority 154.06(1), 381.0066, 489.557(1) FS. Law Implemented 381.0065, 381.0066, 489.557 FS. History—New 2-3-98, Amended 3-22-00, 4-21-02, 5-24-04, 11-26-06, 9-24-07, Formerly 64E-6.030.