Draft Rule Changes for Discussion

DEPARTMENT OF ENVIRONMENTAL PROTECTION

RULE NOS.:	RULE TITLES:
62-6.001	General
62-6.004	Application for System Construction Permit
62-6.009	Alternative Systems.
62-6.010	Septage and Food Establishment Sludge
62-6.0101	Portable Restrooms and Portable or Stationary Holding Tanks
62-6.012	Standards for the Construction, Operation, and Maintenance of Aerobic Treatment Units.
62-6.014	Construction Standards for Drainfield Systems
62-6.0152	Innovative Systems
62-6.025	Definitions
62-6.026	Applications for Innovative System Permits and System Construction Permits
62-6.027	Permits
62-6.0295	Innovative System Reclassification
62-6.030	Fees

PURPOSE AND EFFECT: To update rules by incorporating technical changes to reflect changes in industry; update ASTM International standards for septic related materials; expanding nutrient-reducing system options; amend language to reflect legislative changes; update language related to land application and storage of septage and related fees. This rule changes and addresses innovative system evaluation, aerobic treatment units and performance-based treatment system standards. New rule language and incorporated forms and protocol provide clearer direction to the innovative system permitting process by including standardized monitoring protocols and evaluation criteria. This will streamline permitting and testing of novel technologies. Revised language for aerobic treatment unit updates referenced standards in the existing aerobic treatment unit (ATU) rule, clarifies ATU sizing for multiple dwelling units, and sets clearer expectations for aerobic treatment unit approvals. Revised language for performance-based treatment systems standards condenses and revises definitions of treatment levels into a table format for greater clarity and increases applicability by including a percent removal standard.
SUMMARY: The proposed changes to Chapter 62-6, Florida Administrative Code, are based on proposals that were reviewed and recommended for inclusion by the Technical Review and Advisory Panel.
RULEMAKING AUTHORITY: 154.06(1), 381.006, 381.0011(4), 381.0011(13), 381.0065(3)(a), 381.0066, 489.553(3), 498.553(3)(a), and 489.557(1), FS.6
LAW IMPLEMENTED: 381.0065, 381.0066, 373.495, 386.041, and 489.557, FS.
A HEARING WILL BE HELD AT THE DATE, TIME AND PLACE SHOWN BELOW:

THE FULL TEXT OF THE PROPOSED RULE IS:
62-6.001 General.

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

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

(2) though (7) No change.

Rulemaking Authority 381.0065(3)(a), 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 62-6.001, Amended _____.

62-6.004 Application for System Construction Permit.

(1) though (7) No change.

(8) Innovative Systems must be permitted per Rule 62-6.0152, F.A.C. ~~or new product approval for onsite sewage treatment and disposal systems shall be initiated by submittal of an application for permit using Form DEP 3143, Jan. 94, hereby incorporated by reference. DOH county health departments are authorized to issue installation permits upon receipt of the temporary permit. Form DEP 3144, Jan 94, and Form DEP 3145, Jan 94, hereby incorporated by reference, shall be used to record information that describes notification requirements between the temporary permit applicant, the DOH county health department, and the State Health Office. These forms are to be processed by the DOH county health departments.~~

(9) No change.

Rulemaking Authority 381.0065(3)(a), 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, XX-XX-XX.

62-6.009 Alternative Systems.

Introductory paragraph – No change.

(1) through (4) No change.

(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 shall meet all requirements of this chapter except as noted below.

(a) Drip irrigation systems shall receive effluent from an approved aerobic treatment unit or a performance-based treatment system designed to meet at least secondary treatment standards for $CBOD_5$ and TSS, and shall meet the following requirements:

1. through 22. No change.

23. Drip irrigation systems shall only use components approved by the ~~Bureau of~~ Onsite Sewage Program~~s~~.

24. through 28. No change.

(6) No change.

(7) In-ground Nitrogen-reducing Biofilters (INRB) – As described in this subsection, 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 ~~Nitrogen-reducing media~~ 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; a 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)~~(a)~~ INRB ~~Nitrogen-reducing media~~ layers must ~~shall~~ be installed as follows:

1. The drainfield must ~~shall~~ 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 ~~and shall extend at least one foot beyond the perimeter of the drainfield. The drainfield shall be centered above the sand fill area~~.

2. Below Media Layer 1 ~~the sand fill material layer required in subparagraph 1., above,~~ there must ~~shall~~ be a layer of nitrogen-reducing media and fine aggregate mix (Media Layer 2) ~~media layer~~ 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. ~~The~~ Mmedia Llayer 2 must ~~shall~~ also extend upward along the boundary of Media Layer 1 ~~the sand fill material~~ to a point four to six inches below the bottom of the drainfield. Media Layer 1 must ~~The drainfield shall~~ be centered above ~~the~~ Mmedia Llayer 2. ~~The~~ Mmedia Llayer 2 must

~~shall~~ conform with subparagraphs 8. and 11.~~,~~ below. ~~The media layer shall not be installed when the observed water table is at or above the lowest depth of the media layer.~~

3. The bottom of ~~the~~ Mmedia Llayer 2 must ~~shall~~ be at least 6 inches above the wet season water table.

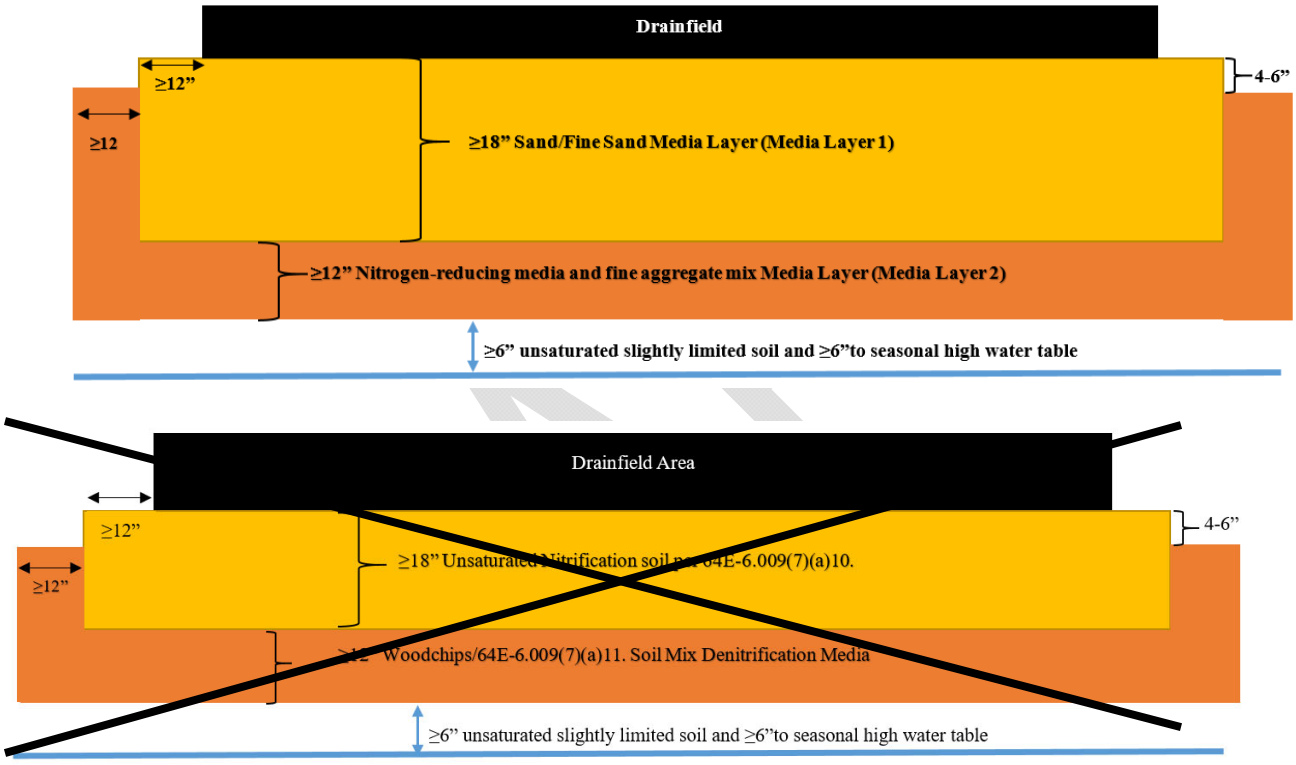

Figure 1. In-ground Nitrogen-reducing Biofilter media layer system

4. ~~While~~ Mmedia longevity and nutrient reduction may be enhanced by the use of low-pressure distribution.~~,~~ Aany d~~D~~epartment-approved drainfield effluent distribution method may be used.

5. The ~~natural~~and existing soil profiles throughout the area of the drainfield and the area where the INRB will be placed must ~~shall~~ indicate slightly limited soils extending from the existing ground surface to at least 36 ~~6~~ inches below existing ground surface ~~the bottom of the nitrogen-reducing media layer~~ in addition to compliance with the effective soil requirements of 62-6.006(1), F.A.C., for installation of the drainfield.

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

7. As measured vertically, no portion of ~~the~~ Mmedia Llayer 2 can ~~required in subparagraph 2., above, shall~~ be within 18 inches of the absorption ~~infiltrative~~ surface of the drainfield.

8. An example of nitrogen-reducing media is lignocellulosic material such as chips or shavings of ~~untreated~~ lumber, ~~blended urban waste~~ 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 ~~shall~~ be demonstrated in Florida-based domestic wastewater studies to be effective at providing a substrate for denitrification.

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

10. ~~The soil layer between the infiltrative surface of the drainfield and the~~ Mmedia Llayer 1 must ~~shall 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 and shall~~ 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. ~~The~~ Mmedia Llayer 2 must ~~shall~~ be ~~a combination of nitrogen-reducing media and fine aggregate, which shall be~~ composed of 40-60% nitrogen-reducing media by volume, with the remainder to be fine aggregate and must ~~. The media layer shall~~ not be installed when the observed water table is at or above the lowest depth of ~~the~~ Mmedia Llayer 2. The fine aggregate to be mixed with the nitrogen-reducing media must ~~shall~~ 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 ~~shall~~ conform to the colors in subparagraph

10., above. ~~The~~ M~~m~~edia L~~l~~ayer 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 ~~shall~~ address the potential for mounding of the effluent between the drainfield and the bottom of ~~the~~ M~~m~~edia L~~l~~ayer 2 at the estimated sewage flow and will increase the separation between the drainfield and Media ~~the~~ L~~l~~ayer 2 ~~required in subparagraph 2., above,~~ 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 ~~shall~~ be installed to monitor this parameter. The observation port must ~~shall~~ be capped and lockable and installed within a protective surface cover. A toilet flange must ~~shall~~ 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 ~~shall~~ 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 ~~shall~~ be grouted to prevent effluent from flowing down the outer surface of the port to the media.

13. Drainfield repair will ~~shall~~ not necessitate M~~m~~edia 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 ~~total nitrogen (~~TN~~)~~ removal effectiveness ~~efficiency~~ which shall be a minimum 65%.

14. Setback distances to Media Layers 1 and 2 ~~the denitrification media or soil material directly above denitrification media~~ extending to the absorption ~~infiltrative~~ surface of the drainfield will ~~shall~~ be reduced as follows ~~by the following~~:

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

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

c. Setbacks to all other parts of the system will comply ~~shall be in compliance~~ with the

requirements in this chapter and section 381.0065, Florida Statutes.

(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 water table during the wettest season of the year. There must be at least 6 inches of unsaturated slightly limited soil between the bottom of the liner and the seasonal high-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 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 1500 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 not associated with a seasonal water table of less than 48 inches; 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.

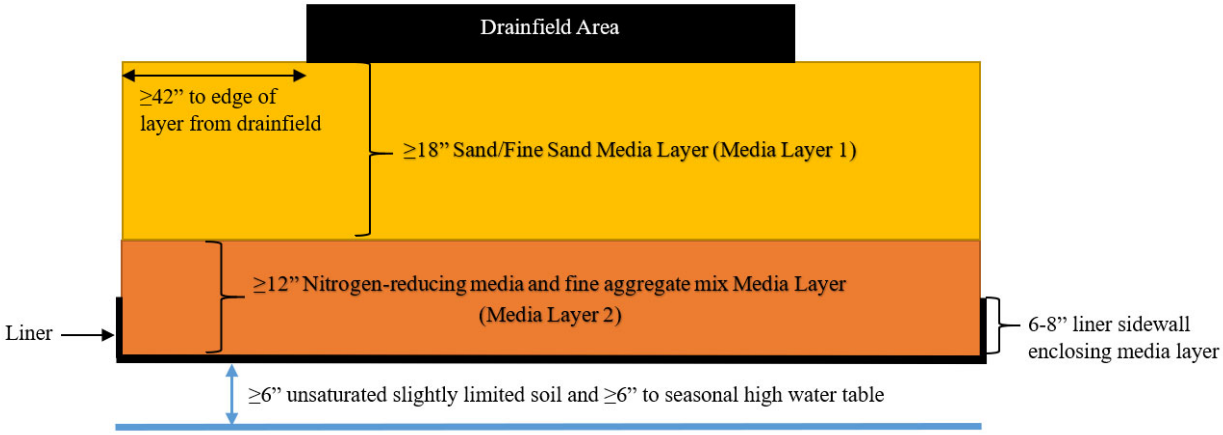

Figure 2. INRB with Liner without underdrain

(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 shall 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. In order to maintain distribution as high as possible above the seasonal high-water table and to maintain the shallowest depth to finished grade, the transmission line must not have a slope exceeding 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 seasonal high-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 Rule 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 water table at the wettest season of the year. There must be at least 6 inches of unsaturated slightly

limited soil between the bottom of the liner and the seasonal high-water table.

11. Where the system has a total required drainfield size over 1500 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, Florida Statutes.

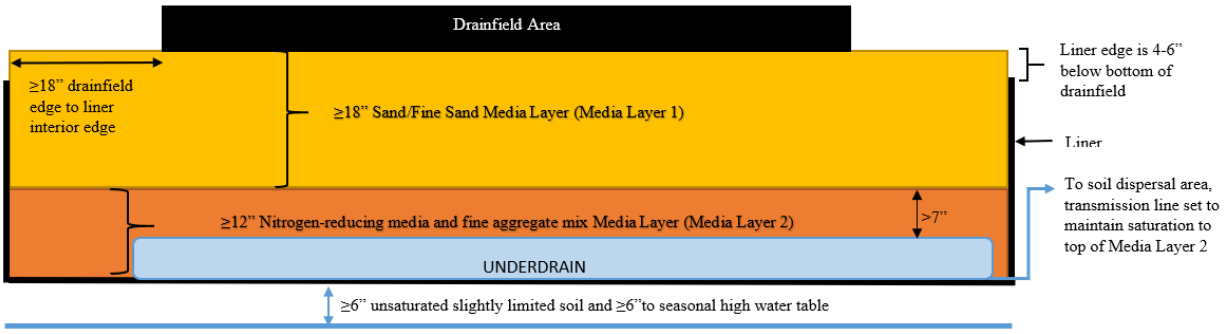

Figure 3 – INRB with liner and underdrain

(e)~~(b)~~ Prior to covering Media Layer 2, in ~~In~~ addition to the inspections required in R~~r~~ule 62-6.003, F.A.C., upon completion of the installation of ~~the M~~media L~~l~~ayer 2 ~~but before covering the media layer~~, a person installing or constructing the system will ~~shall~~ notify the DOH county health department that ~~the M~~media L~~l~~ayer 2 has been installed and must ~~shall~~ have that portion of the system inspected by the department. If the inspection of ~~the M~~media L~~l~~ayer 2 is the initial inspection of the system, the initial inspection fee in Rule ~~paragraph~~ 62-6.030(1)(i), F.A.C., must ~~shall~~ be paid. If an initial inspection occurred before the M~~m~~edia L~~l~~ayer 2 inspection, the reinspection fee in Rule ~~paragraph~~ 62-6.030(1)(j), F.A.C., must ~~shall~~ be paid.

(c) through (d) renumbered to (f) through (g) No change.

(8) Alternative system component and design approval – ~~After innovative system testing is completed,~~ R~~r~~equests for approval of system components and designs which are not specifically addressed in this chapter and not required to comply with Rule 62-6.0152, F.A.C, must be in writing and ~~shall~~ be submitted to the department's ~~Bureau of~~ Onsite Sewage Program~~s~~ Office.

(a) Requests for non-innovative alternative system component material and design approval must~~shall~~ include:

1.~~-~~Detailed drawings and design and material specifications for the component;~~Detailed system design and construction plans by an engineer licensed in the State of Florida,~~

2. Proposed monitoring procedures; and~~Certification of the performance capabilities of the product submitted by an engineer licensed in the state of Florida,~~

3. An owner's manual, an installation manual, an operation and maintenance manual, and inspection procedures.~~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 subparagraph ~~62-6.009(7)~~(a) above, ~~F.A.C.,~~ manufacturers of drip effluent disposal system distribution lines, emitters, and components must ~~shall~~ apply for and obtain approval from the ~~Bureau of~~ Onsite Sewage Program~~s~~ 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 must ~~shall~~ provide design and installation manuals for engineering and construction guidance. Design manuals must ~~shall~~ include tables that detail flow rates vs. pressure and pressure loss per length(s) of distribution pipe.

(c) through (e) No change.

(f) Prior to the installation of the first system component in each county, the manufacturer of an alternative system component, or their agent that has been authorized in writing, must provide training on the system component to the Onsite Sewage Program Office and at least one certified inspection staff of the county health department. Training must include installation procedures, and be provided free of charge.

(9) through (10) No change.

(11) All materials incorporated herein have been deemed copyright protected and are

available for inspection at the Department of Environmental Protection, Division of Water Resource Management at www.floridadep.gov or 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000. ~~may be obtained from the Bureau of Onsite Sewage Programs at www.MyFloridaEH.com or 4052 Bald Cypress Way, Bin A08, Tallahassee, Florida 32399-1713~~.

Rulemaking Authority 381.0065(3)(a) 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, XX-XX-XX.

62-6.010 Septage and Food Establishment Sludge.

(1) No septic tank, grease interceptor, privy, or other receptacle associated with an onsite sewage treatment and disposal system can ~~shall~~ be cleaned or have its contents removed until the service person has obtained an annual operating ~~written~~ permit ~~(Form DEP 4013, 01/92, Operating Permit, herein incorporated by reference)~~ from the DOH county health 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 ~~shall~~ be made to the DOH county health department on Form DEP 4012, 01/92, “Application for Septage Disposal Service Permit, Temporary System Service Permit, Septage Treatment and Disposal Facility, Septic Tank Manufacturing Approval” herein incorporated by reference and available at https://www.flrules.org/Gateway/reference.asp?No=Ref-XXXXX. Any change to the permit conditions requires a permit amendment using Form DEP 4012. Permit amendments do not alter the permit issue date. 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, ~~off-truck stabilization tanks and pH testing equipment where lime stabilization and land application are proposed,~~ 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 DOH county health department. Tanks used for the ~~stabilization and~~ storage of septage and food service sludges must ~~shall~~ be constructed, sized, and operated in accordance with the following provisions:

1. ~~Stabilization tanks and~~ Sseptage storage tanks must ~~shall~~ be constructed of concrete, fiberglass, corrosion-resistant steel, polyethylene, or polypropylene other equally durable material. Tanks must ~~shall~~ be watertight and must ~~shall~~ be water tested during the inspection by the Department for leaks prior to placing into service. ~~The stabilization tank shall have a liquid capacity of at least 3,000 gallons.~~ Storage tanks installed after the effective date of this rule must meet the setback requirements of Rule 62-6.0101(7)(a), F.A.C.

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

~~3. Stabilization tanks shall contain aeration or mixing devices which will ensure thorough agitation or mixing of lime with the waste as specified in Chapter 6, EPA 625/1-79-011, Process Design Manual for Septage Treatment and Disposal, herein incorporated by reference.~~

(b) through (c) No change.

(3) through (5) No change.

(6) ~~Treated~~ Sseptage and sludges must ~~shall~~ be transported ~~to the disposal site~~ in such a manner ~~so as~~ to preclude leakage, spillage or the creation of a sanitary nuisance.

(7) The food establishment sludge and contents from onsite waste disposal systems must ~~shall~~ be disposed of at a site ~~approved by the DOH county health department~~ and by a ~~an approved~~ disposal method approved by the Florida Department of Environmental Protection.

Untreated domestic septage or food establishment sludges must ~~shall~~ not be applied to the land. ~~Criteria for approved stabilization methods and the subsequent land application of domestic septage or other domestic onsite wastewater sludges shall be in accordance with the following criteria for land application and disposal of domestic septage.~~

(a) Land application of domestic septage and sludges is not ~~shall be~~ permitted under this chapter. ~~by the department provided such septage and sludges have been properly treated by an approved septage-stabilization process, including lime stabilization, and an application using Form DEP 4012 has been completed as part of the permitting process. Prior to discharge of septage or food establishment sludge into a stabilization tank, the septage or sludge shall be screened in a pretreatment tank or chamber which contains a final screening method using bar screens having a maximum gap of 1/2 inch or rock screens or other similar mesh material having a maximum 3/4 inch opening. Material retained in the screening process shall be limed, containerized, and disposed of at an approved solid waste disposal facility. Septage or sludge shall pass from the pretreatment tank or chamber to the stabilization tank. Lime stabilization of septage shall be in accordance with processes and designs described in Chapter 6, EPA 625/1-79-011, Process Design Manual for Sludge Treatment and Disposal, hereby incorporated by reference. Facilities approved for septage treatment under this rule shall not receive and treat more than 20,000 gallons of septage or combined septage, grease interceptor, portable restroom or other receptacle waste associated with an onsite sewage treatment and disposal system on any one day and shall not exceed a monthly average of 10,000 gallons of septage or septage and combined domestic waste per day. Stabilization by lime shall raise the pH of the septage to a level of 12 for a minimum of two hours or to a level of at least 12.5 for a minimum of 30 minutes to be deemed sufficient. The pH of the stabilized septage shall be maintained at a level of at least 11 until actual land application, but shall not be landspread until the pH of the stabilized septage has fallen below 12.5. To check the pH of the stabilized septage, a sampling port having an internal diameter of no less than 1/2 inch and no more than 3/4 inch and located no more than 60**

~~inches above the ground surface shall be used to allow sampling of waste tank contents. Lime purchase receipts shall be kept at the place of business for a minimum of 6 months.~~

~~1. Use on playgrounds, parks, golf courses, lawns, hospital grounds, or other unrestricted public access areas where frequent human contact is likely to occur is prohibited.~~

~~2. Application is limited to sod farms, pasture lands, forests, highway shoulders and medians, plant nursery use, land reclamation projects and soils used for growing human food chain crops. Application methods shall be conducted in a manner which will disperse the treated septage uniformly over the land application site.~~

~~a. Pasture vegetation on which stabilized septage or sludge has been applied shall not be cut for hay or silage nor grazed for a period of 30 days from the last application.~~

~~b. No human food chain crops except hay, silage, or orchard crops shall be harvested from a land application area for a period of 60 days following the last application of septage or sludges.~~

~~c. Domestic septage or sludge shall not be used for the growing or cultivation of tobacco, root crops, leafy vegetables, or vegetables to be eaten raw. Vegetables and fruits which come in contact with the ground surface shall not be grown on land used for septage application for a period of 18 months after the last application of septage or sludge.~~

~~d. When applied to unvegetated soils, stabilized domestic septage or sludge shall be incorporated into the soil within 48 hours of application.~~

~~(b) No land application of stabilized septage or food service sludge may occur until:~~

~~1. The site has been inspected and approved by department personnel.~~

~~2. The site evaluation fee has been submitted.~~

~~3. An Agricultural Use Plan, Form DEP 4012A, 08/09, herein incorporated by reference, has been completed for the proposed application site.~~

~~a. Agricultural use plans shall describe the manner in which treated domestic septage and sludges are to be used as part of a planned agricultural operation. Methods of application, proposed crops and their fertilizer needs, vegetative types proposed, erosion management,~~

~~access control for humans and animals, and anticipated harvesting periods shall be included.~~

~~b. Agricultural use plans shall include information on the soil and geologic conditions at the disposal site which could limit the areas available for land application.~~

~~4. The plan has been submitted for review and approval to the DOH county health department having jurisdiction.~~

~~5. The DOH county health department has granted approval to use the site.~~

~~(c) No person shall dispose of domestic septage or sludge by land application unless they have complied with approved treatment and disposal methods described in rule 62-6.010, F.A.C. Lime stabilization in the tank of a septage hauling vehicle or in the tank of an onsite sewage treatment and disposal system is not an approved septage treatment method.~~

~~(d) Land application of septage shall occur only in accordance with paragraph 62-6.010(7)(a), F.A.C., unless prohibited by the DOH county health department due to a brief condition which creates a potential for a sanitary nuisance as exemplified in paragraph 62-6.010(7)(l), F.A.C.~~

(b)~~(e)~~ 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 treatment site or at the main business location which provides the information listed below. Records must ~~shall~~ 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. Receipts for lime or other materials used for treatment,~~

6. through 8. Renumbered 5. through 7. No change.

~~(f) All Department of Environmental Protection-regulated septage treatment facility operators shall maintain permanent records of the septage or waste receipt, treatment and discharge. Records shall be retained for five (5) years. At a minimum, these records shall include the~~

~~following.~~

~~1. Date and time of each load of septage or waste is received,~~

~~2. Name of company from which the septage or waste is received,~~

~~3. Identification of the truck from which the septage or waste was received,~~

~~4. Signature from the driver acknowledging delivery of the septage or waste,~~

~~5. Quantity of septage or waste received,~~

~~6. Date and time of discharge of each load of treated septage or waste,~~

~~7. Name of the company which received the treated septage or waste from the treatment facility,~~

~~8. Signature from the driver of the truck which received the treated septage or waste; and,~~

~~9. Quantity of treated septage or waste discharged to the truck.~~

~~(g) A summary of the total volume of septage applied to each site shall be submitted to the DOH county health department quarterly.~~

~~(h) Domestic wastewater systems residuals shall not be mixed with septage for treatment and disposal at department approved sites.~~

(i) renumbered to (c) No change.

~~(j) The land application area shall not be located closer than 3000 feet to any Class I water body or Outstanding Florida Water as defined in chapter 62-302, F.A.C., or 200 feet to any surface water bodies except canals or bodies of water used for irrigation purposes which are located completely within and not discharging from the site. The land application area shall not be located closer than 500 feet to any shallow public water supply wells, nor closer than 300 feet to any private drinking water supply well. The application area shall be no closer than 300 feet to any habitable building and a minimum of 75 feet from property lines and drainage ditches.~~

~~(k) The land application site shall have a minimum 24 inches of unsaturated soil above the ground water table at the time of septage or sludge application. The seasonal high ground water table for the site may be indicated in the Agricultural Use Plan by soil survey maps. If the wet~~

~~season high ground water table is within 2 feet of the surface or is not determined in the Agricultural Use Plan, the water table encountered at the time of septage or sludge application shall be determined by use of a monitoring well.~~

~~(l) Septage or sludge shall not be applied during rain events of sufficient magnitude to cause runoff, or during periods in which surface soils of the land application area are saturated. The land application area shall have sufficient buffer areas or stormwater management structures to retain the runoff from a ten-year one-hour storm on the site. Sufficient septage storage capacity shall be provided for periods of inclement weather and equipment failure. Facilities shall be designed, located, and operated to prevent nuisance conditions and avoid site run-off.~~

~~(m) Land application area topographic grades shall not exceed 8 percent.~~

~~(n) The land application area and an area 200 feet wide adjacent to, and exterior of, the land application area boundary shall contain no subsurface fractures, solution cavities, sink holes, excavation core holes, abandoned holes, or any other natural or manmade conduits which allow contamination of ground water. Determinations of site conditions shall be made as part of a geophysical examination of the property by qualified persons.~~

~~(o) Florida water quality criteria for groundwater and surface water shall not be violated as a result of land application of septage or sludge. Water quality testing of application areas may be required if the department determines that septage application not conforming to this rule is evident. If water quality violations are indicated, the site owner shall suspend land application activities.~~

~~(p) A layer of permeable soil at least 2 feet thick shall cover the surface of the land application area.~~

~~(q) Unless required by law to be limited by phosphorous, application rates of septage and food establishment sludges are limited by the nitrogen content of the waste.~~

~~1. Where the application rate is limited by nitrogen content, the maximum annual surface application rate of total nitrogen is 500 pounds per acre during any 12-month period. Application~~

of septage shall be applied as evenly as possible during the 12 month period to ensure maximum uptake of nitrogen by the crops used. This equates to 6 dry tons or 40,000 gallons of typical septage per acre per year. However, if the following formula, based on the annual uptake of nitrogen for a given crop is used, the 40,000 gallons of septage applied per acre per year shall be increased if the nitrogen content of the septage will not exceed the nitrogen uptake of the crop.

$$AAR = N \div 0.0026$$

AAR is the annual application rate in gallons per acre per 365 day period; and N equals the amount of nitrogen in pounds per acre per 365 day period needed by the crop or vegetation grown on the land. Application methods shall be conducted in a manner which will disperse the treated septage uniformly over the land application site.

2. Where the application rate is limited by phosphorous, the maximum annual surface application rate of total phosphorous is 40 pounds per acre during any 12 month period. Application of septage shall be applied as evenly as possible during the 12 month period to ensure maximum uptake of phosphorous by the crops used. This equates to 2 dry tons or 12,000 gallons of typical septage per year. However, if the following formula, based on the annual uptake of phosphorous for a given crop is used, the 12,000 gallons of septage applied per acre per year shall be increased if the phosphorous content of the septage will not exceed the phosphorous demand of the crop.

$AAR=P \div 0.0076$ if the crop demand is calculated for P_2O_5.

$AAR=P \div 0.0033$ if the crop demand is calculated for P.

AAR is the annual application rate in gallons per acre per 365 day period; and P equals the Crop Phosphorous Demand in pounds per acre per 365 day period calculated for the crop or vegetation grown on the land. Application methods shall be conducted in a manner which will disperse the treated septage uniformly over the land application site.

(r) Permanent records of actual application areas and application rates shall be kept. These

~~records shall be maintained by the site owner, lessee, or the land applicator for a period of five years, and shall be available for inspection upon request by the department or by DEP. An annual summary of the total septage or sludge applied shall be provided with the annual update to the Agricultural Use Plan. Records shall be kept and shall include:~~

~~1. Location of the septage treatment facility from which each load of treated septage is obtained.~~

~~2. Date and time the treated septage was obtained from the treatment facility.~~

~~3. Dates of septage or sludge land application.~~

~~4. Weather conditions when applied.~~

~~5. Location of septage or sludge application site.~~

~~6. Amounts of septage or sludge applied.~~

~~7. Specific area of the site where septage or sludge was applied.~~

~~8. pH of stabilized septage or sludge being applied.~~

~~9. Soil groundwater table when septage was applied.~~

~~10. Vegetational status of application area.~~

(s) renumbered to (d) No change.

~~(t) Application of food establishment sludge to the land shall be permitted if such food establishment sludge has been properly treated by lime stabilization, or by any other process which produces similar kills of microorganisms and has been approved by the State Health Office.~~

~~(u) Mixing of unstabilized food establishment sludge with stabilized septage prior to land application is not permitted.~~

~~(v) Food establishment sludge shall be blended with septage and treated prior to land application. The ratio of food establishment sludge to septage shall be no greater than 1:1.~~

(8) ~~Stabilization tanks and~~ S~~s~~eptage and food establishment storage tanks may be located at ~~regional stabilization facilities, at~~ sites owned or leased by the disposal service. ~~service or at sites owned by the owner or lessee of the septage land application site~~. 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 ~~the stabilization tank and~~ septage and food establishment sludge storage tank site must ~~shall~~ be provided with back flow prevention devices to prevent potential contamination of water supplies.

~~(10) All materials incorporated herein may be obtained from the Bureau of Environmental Health at www.MyFloridaEH.com or 4052 Bald Cypress Way, Bin A08, Tallahassee, Florida 32399-1713.~~

Rulemaking Authority 381.0065(3)(a), 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, XX-XX-XX.

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

(1) No change.

(2) Application for a service permit shall be made to the DOH county health department on Form DEP 4012, 01/92, "Application for Septage Disposal Service Permit, Temporary System Service Permit, Septage Treatment and Disposal Facility, Septic Tank Manufacturing Approval," herein incorporated by reference and available at https://www.flrules.org/Gateway/reference.asp?No=Ref-XXXXX. 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 Rule 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 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, ~~off truck stabilization tanks and pH testing equipment where lime stabilization and land application are proposed,~~ 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 DOH county health department. Tanks used for the ~~stabilization and~~ storage of portable or stationary holding tank waste and portable restroom waste must ~~shall~~ be constructed, sized, and operated in accordance with the provisions of Rule ~~subparagraphs~~ 62-6.010(2)(a)1.and 2.~~-3.~~, F.A.C.

(b) through (c) No change.

(3) through (5) No change.

(6) All portable restroom and portable or stationary holding tank waste haulers regulated by C~~c~~hapter 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 ~~shall~~ be retained for five (5) years.

(a) No change

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

(c) through (d) No change

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

(f) No change.

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

(a) through (t) No change.

(u) Portable or stationary holding tank, portable restroom, and portable hand sink wastes must ~~shall~~ be disposed of into a ~~septage treatment and disposal facility approved by the department or into a~~ treatment facility approved or permitted for such disposal by the Department of Environmental Protection. These wastes must be disposed of at ~~shall be land applied under provisions of subsection 62-6.010(7), F.A.C., provided~~ a DEP-approved treatment facility or DEP-regulated land application site ~~is not available~~. 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) When disposed of in a department approved lime stabilization facility, the portable restroom, portable hand washing and portable or stationary holding tank wastes shall be blended with domestic septage at a rate of no less than 3 parts septage to 1 part holding tank, portable restroom or portable hand washing facility waste prior to lime stabilization. Treatment and disposal shall comply with the provisions of paragraphs 62-6.010(7)(a)-(u), F.A.C.~~

(w) through (x) renumbered (v) through (w) No change.

(8) All materials incorporated herein that have been deemed copyright protected are available for inspection at the Department, Division of Water Resource Management, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000 or at the Department of State, R.A. Gray Building, 500 South Bronough Street, Tallahassee, Florida 32399-0250.~~All materials incorporated herein~~

~~may be obtained from the Bureau of Onsite Sewage Programs at www.MyFloridaEH.com or 4052 Bald Cypress Way, Bin A08, Tallahassee, Florida 32399-1713~~.

Rulemaking Authority 381.0065(3)(a), 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, XX-XX-XX.

62-6.014 Construction Standards for Drainfield Systems.

(1) No change.

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

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

1. ASTM D-3034-16~~98~~, Standard Specification for Type PSM Poly-(Vinyl Chloride)-(PVC) Sewer Pipe and Fittings (2016~~1998~~), herein incorporated by reference.

2. ASTM D-2729-17~~96~~, Standard Specification for Poly-(Vinyl Chloride)-(PVC) Sewer Pipe and Fittings (2017 ~~1996~~), herein incorporated by reference.

3. AASHTO M252M-96, Standard Specification for Corrugated Polyethylene Drainage Pipe (1996), herein incorporated by reference. ~~Materials used to produce this pipe shall meet ASTM D 3350-98a, Standard Specification for Polyethylene Plastics Pipe and Fittings Materials (1998), Cell Classification 324420C, herein incorporated by reference.~~

4. ASTM F667/667M-16 ~~405-97~~, Standard Specification for 3 through 24 in. Corrugated Polyethylene ~~(PE)~~ Pipe and Fittings (2016~~1997~~), herein incorporated by reference. ~~Materials used to produce this pipe shall meet ASTM D 3350-98a, Standard Specification for Polyethylene Plastics Pipe and Fittings Materials (1998), Cell Classification 324420C or E, herein incorporated by reference.~~

5. ASTM F-810-12 ~~99~~, Standard Specification for Smoothwall Polyethylene (PE) Pipe for Use in Drainage and Waste Disposal Absorption Fields (2018~~1999~~), herein incorporated by reference. ~~Materials used to produce this pipe shall meet ASTM D 3350-98a (1998), Standard Specification~~

~~for Polyethylene Plastics Pipe and Fittings Materials, Cell Classification 32442C or E, herein incorporated by reference.~~

(b) through (d) No change.

(3) through (4) No change.

(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 waste receptacles. When used, these systems must ~~shall~~ be constructed as specified below.

(a) through (b) No change.

(c) When installing a drainfield system that uses mineral aggregate, all portions of the header pipe and perforated drain pipe must ~~shall~~ be installed in aggregate conforming to ASTM C33/C33M-18, Standard Specification for Concrete Aggregates (2018) ~~86~~ or lightweight aggregate conforming to ASTM C330/C330M-17a Standard Specification for Lightweight Aggregates for Structural Concrete (2017), herein incorporated by reference, ~~87~~ meeting State of Florida Department of Transportation (FDOT) specifications under Section 901, "Standard Specifications for Road and Bridge Construction, 2019~~1991~~" and the following gradation requirements. The FDOT "Standard Specifications for Road and Bridge Construction, 2019" is herein incorporated by reference and available at https://www.flrules.org/Gateway/reference.asp?No=Ref-XXXXX.

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 shall pass a #200 sieve.

1. through 2. No change.

(d) through (f) No changes.

(g) The inside diameter of the drain pipe used in drainfields will ~~shall~~ be determined based on

the type and design of the proposed absorption system. However, for standard gravity aggregate drainfield systems, inside pipe diameter will ~~shall~~ not be less than 4 inches. Perforated pipe must ~~shall~~ have two rows of holes, and a minimum perforated area of 1 1/2 square inches per linear foot. Perforations shall be located not less than 30º or more than 60º from the vertical on either side of the center line of the bottom of the pipe. However, for drainfield systems designed by an engineer, drainpipe perforation area and hole configuration must ~~shall~~ assure that effluent is distributed as equally as possible throughout the drainfield area. All plastic pipe must ~~shall~~ conform to the standards of ASTM D ~~3034-16~~ 98, ~~Standard Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings (1998), herein incorporated by reference,~~ ASTM F667/F667M-16 ~~405-97, Standard Specification for Corrugated Polyethylene (PE) Pipe and Fittings (1977), herein incorporated by reference~~, or ASTM F ~~810-12~~ 99 (1999), as ~~herein~~ incorporated by reference in subsection (2) above.

(h) through (k) No change.

(6) All ASTM and AASHTO materials incorporated herein are deemed copyright protected, and are available for inspection at the Department of Environmental Protection, Division of Water Resource Management, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000 or at the Department of State, R.A. Gray Building, 500 South Bronough Street, Tallahassee, Florida 32399-0250 ~~may be obtained from the Bureau of Onsite Sewage Programs at www.MyFloridaEH.com or 4052 Bald Cypress Way, Bin A08, Tallahassee, Florida 32399-1713~~.

Rulemaking Authority 381.0065(3)(a) 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, XX-XX-XX.

62-6.0152 Innovative Systems

(1) Prior to an innovative system being used in any manner with an onsite sewage treatment and disposal system, the applicant proposing to have the innovative system approved

for use in Florida must make application to the Onsite Sewage Program Office (OSP) using Form DEP 3143, 08/19, herein incorporated by reference. If all applicable requirements are met, an Innovative System Permit (ISP) will be issued by the OSP. The ISP will be for a specified testing period and contain requirements for the innovative system to be installed. The department's Protocol on Innovative Systems, October 2019, is hereby incorporated by reference, and is referred to as "Protocol" in this section.

(2) Innovative system applications require a demonstration of the innovative product's efficacy prior to the testing in paragraph (2)(a), below. Where data from previous testing only meets the criteria in 4.B. of the Protocol, the applicant must install and monitor one system to demonstrate the innovative product's efficacy; or the applicant may provide sufficient data as defined by Protocol. Once the innovative product's efficacy has been determined, additional system testing is required as stated in this section.

(a) No less than three innovative systems for treatment components and fifteen innovative systems for disposal components will be tested for a specified time period to be determined based on the individual application, to demonstrate the system will function properly and reliably to meet the requirements of this chapter and section 381.0065, FS. The maximum number of systems allowed under the ISP will be twelve for treatment components and seventy for disposal components. Modifications to innovative system design is not allowed during testing required by this subsection.

(b) During innovative system testing, the innovative product must be tested as constructed by, and in the manner intended for use by the manufacturer. When installed, the entire system, including the innovative product itself, must comply with all required setbacks, separation to seasonal high water table, effective soil depth and loading rates. For disposal components, the proposed comparability rating must not exceed 2.5. The comparability rating is calculated as the ratio of absorption surface of mineral aggregate to absorption surface of the

innovative disposal component. Any other regulatory requirement that is not part of the innovative product or does not have direct bearing on the innovative product being tested must be installed in compliance with all applicable regulations.

(c) Treatment components, which have already been approved and will be installed as meeting the requirements of Rule 62-6.012(1) F.A.C., are not required to obtain an ISP, provided the treatment component's proposed performance, as a performance-based treatment system, is no better than the average performance reported in the applicable NSF completion report.

(3) The applicant for the ISP will be the permit holder and will be held responsible for all information supplied to the department. The signed application and submission of all required information serve as the basis by which the department determines the issuance of the ISP. Applications for an ISP must be made to the OSP on Form DEP 3143 08/19 and must be accompanied by all required exhibits and fees, including all information required in the Protocol. Once the ISP has been issued, no modifications are allowed to the ISP application. Except as provided for in subsection 62-6.028(4), F.A.C., alternative drainfield materials and designs must not be approved which would result in a reduction in drainfield size using the mineral aggregate drainfield system as described in section 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. While the permit is entitled an ISP, and the entire system can be innovative, it is recognized that where the innovative part is an individual item placed within and intended to be used as part of or in conjunction with the system, and not the entire system, that individual item is that part which is termed innovative.

(a) The applicant must respond in writing to requests for additional information within 60 days after receipt of the request. If the applicant fails to comply with this requirement, the

application will be deemed complete and the department will complete processing of the application based on the information it has received.

(b) Modifications to the innovative system application after testing has begun will require an applicant to provide a new application, along with necessary exhibits and fees.

(c) An ISP issued by the OSP on or after the effective date of this Rule is valid for five years from the date of issue.

(d) ISPs issued more than five years prior to the effective date of this Rule expire 180 days after the effective date of this Rule. An applicant having a previously issued ISP that will expire per this paragraph can apply for a new ISP prior to the expiration of their current permit, and must include a new application, including all required exhibits and fees.

(e) The applicant receiving an ISP per paragraph (c) may request a one-time extension for a second five-year period, at no cost. The extension request must be received by the OSP at least 90 days prior to the ISP expiration date and must include a statement from the applicant that the conditions under which the original ISP was issued have not changed. If conditions have changed, or if the extension request has not been received per this paragraph, extensions will not be allowed, and a new application and fee will be required.

(4) Innovative System Permitting - Innovative system permit issuance is the responsibility of the OSP. Where the innovative system applicant requires any form of maintenance on the innovative system to be tested, a template of a maintenance contract to be used with each system tested must be included in the application. The applicant must provide in the maintenance contract template how and when the maintenance is to be performed, any determining factors which influence the decision to perform required maintenance, and must allow any septic tank contractor or state-licensed plumber to provide maintenance, as long as the ISP applicant has provided training and written authorization to the septic tank contractor or

state-licensed plumber. ISPs that intend to be classified as a performance-based treatment system require an approved maintenance entity that will perform all required maintenance on the system.

(a) For innovative systems requiring a maintenance contract, the applicant must train and certify in writing a maintenance entity. During ISP testing, the maintenance entity is not considered a maintenance entity as used in ss. 381.0065(3)(n) F.S. The applicant may have more than one certified maintenance entity. Any change in certification status must be reported by the applicant to the OSP.

(b) An innovative system cannot be used as a component to any performance-based treatment system where any benefit is to be received per Rule 62-6.028, F.A.C. However, where an innovative treatment component is used to enhance what would otherwise be a permittable PBTS, the treatment component may be used to further treat the sewage, but no additional treatment level will be recognized. The component being tested does not receive benefits per 62-6.028, F.A.C.

(5) ISP incorporation into construction permits issued by county health departments - After the OSP has approved the ISP, DOH county health departments are authorized to issue system construction permits for individual onsite sewage treatment and disposal systems that include the innovative systems. The ISP applicant must comply with the training requirement in Rule 62-6.009(8)(f). The county health department must receive a complete application in accordance with Parts I and if applicable, Part IV, of Chapter 62-6, F.A.C and review the application in accordance with all appropriate requirements. All innovative system permit requirements must be incorporated into the construction permit. The innovative system applicant must concurrently notify the OSP when an application is submitted to the county health department.

(a) The design and installation must comply with the conditions of the ISP and the following additional criteria:

1. Innovative systems are allowed in repair, existing-modification and new construction permits, however all application and construction standards for new systems must be met. All flow must be directed into the innovative system and split flow systems are not allowed.

2. Construction permit applications issued by the CHD which include innovative systems or components, require a separate plan for a system that does not include the innovative system being used, which can include removal of the innovative system and installation of the non-innovative system. This will include a site plan that shows both systems and how they will be installed in relationship to each other, and how the other system will replace the innovative system should it not perform in compliance with the design. This can be done using the same application, but as a different proposal, which is required to be used if, or when, the innovative system does not perform in compliance with the design. Where the innovative system will be replaced by the non-innovative system, it will be permitted and inspected as a new system.

(b) As part of the construction permit application, the system owner must complete Form DEP 3144, 08/19, herein incorporated by reference, and provide it to the CHD.

(6) Innovative System Testing-

After ISP issuance, the applicant must provide quarterly reports to the OSP which includes a tabular summary of installations and testing, and information on the progress of the innovative system evaluation. Reports are due by the 21st day of the month following the completion of a standard calendar quarter. A standard calendar quarter includes the months January through March; April through June; July through September; and October through December. If the 21st day of the month falls on a weekend or holiday, the deadline will be the close of the following business day. Failure to submit quarterly reports within 31 days of the end

of the quarter will be considered in violation and subject to fines per s.381.0061, FS. Where any failure or malfunction of the innovative system itself, or system of which it is a component, the applicant is required to report the incident to the OSP within five working days.

(7) Following the installation and testing of the number of systems required by the innovative system permit, and the submission of all required information and results, the applicant may request classification of their innovative system by the OSP. Only systems that received final approval from the county health department and where the establishment served by the system was occupied during the entire testing can be used in the department's evaluation for classification. The department will approve the classification request only if the department is satisfied that the system will reliably perform to the standards for which it is being approved. Evaluation criteria will be per the department's Protocol. Requests for classification must include the following:

(a) Specification of the proposed classification (treatment, disposal, both);

(b) Complete results and analysis of testing of all systems installed. Results must be in a spreadsheet compatible with department software;

(c) Complete observations of system performance;

(d) Complete records regarding maintenance, repairs or modifications performed on any systems;

(e) All comments from the maintenance entities, system users, and design engineers (if applicable). The innovative system applicant must contact these parties and all users by email and specifically request their comments regarding their experience in the use and operation of the system, to include any issues or problems that were noted;

(f) Comments from the county health departments in the counties where the systems were installed. CHDs will provide comments to the OSP using the criteria in paragraph (e), above;

(g) Monitoring procedures; and

(h) An owner's manual, an installation manual, operation and maintenance manual, and inspection procedures updated based on testing experience. These must comply with requirements of 3.D of the Protocol;

Rulemaking Authority 381.0011(13), 381.006, 381.0065(3)(a) FS. Law Implemented 381.0065, 381.0067, 386.041 FS. History–New XX-XX-XX.

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 mustshall be installed, operated and maintained in conformance with the following provisions:

(1) Aerobic treatment units designed to treat up to 1500 gallons of sewage waste per day mustshall be listed by a third party certifying program approved by the State Health Office. Aerobic treatment units mustshall 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) 40-20182013, "Residential Wastewater Treatment Systems", revised April 2013; nitrogen reduction as defined by NSF/ANSI 245-20182013, "Wastewater Treatment Systems – Nitrogen Reduction," revised April 2013; onsite residential and commercial graywater treatment systems as defined by NSF/ANSI 350-20172013, "Onsite Residential and Commercical Water Reuse Treatment Systems," revised December 2012 . These NSF/ANSI standards are hereby incorporated by reference, have been deemed copyright protected, and are available for

inspection at the Department of Environmental Protection, Bureau of Environmental Health, 4025 Esplanade Way, Tallahassee, Florida 32399-1710 ~~or at the Department of State, R.A. Gray Building, 500 South Bronough Street, Tallahassee, Florida 32399-0250~~. An approved third party certifying program must~~shall~~ 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 State Health Office of the results of monitoring visits to manufacturers and distributors annually, within 60 days of the conclusion of the calendar year ~~monitoring~~. Approved distributors must be reported by the manufacturer to the certifying agency.

(d) Submit completion reports on testing for review by the State Health Office.

(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 will~~shall~~ also apply to the construction, design, and operation of aerobic treatment units treating up to 1500 gallons per day ~~or less~~:

(a) An appropriate mechanism must~~shall~~ be provided to make access ports vandal, tamper, and child resistant as specified by the manufacturer and accepted by the certifying program. ~~Acceptable protection of openings must~~shall ~~consist of one or more of the following methods as specified by the tank manufacturer:~~

~~1. A padlock.~~

~~2. A cover that can be removed only with specialized tools. This shall include covers~~

~~fastened using special screws.~~An ~~“O” ring with twist lock cover requiring special tools for removal~~

~~3. Covers weighing 65 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.~~

(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~~shall~~ 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.~~All warning devices shall be wired separately from the aerobic unit so that disconnecting the aerobic unit from electricity will activate the warning device.~~ If installed outside, the alarm must~~shall~~ be waterproof.

(d) Each unit must~~shall~~ 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~~shall~~ 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

~~For each additional bedroom or each additional 750 square feet of building area, or fraction thereof, treatment capacity shall be increased by 60 gallons.~~

~~COMMERCIAL~~ 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
801-1000	1000
1001-1200	1200
1201-1500	1500

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 willshall 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 calculated by adding up the estimated sewage flows from each dwelling unit from Table I.

2. These figures assume that the aerobic system will be treating domestic strength sewage with $CBOD_5$ and suspended solids values typically not exceeding 300 and 200 milligrams per liter, respectively. For wastewaters with higher $CBOD_5$, higher suspended solids values, or for facilities that exhibit short-term hydraulic surge conditions, additional treatment or pre-treatment facilities willshall be required when specified by design engineers, plant manufacturers, or by the DOH county health department.

(f) There mustshall 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 mustshall be disposed of on the owner's property in conformance with other requirements of this chapter except as provided for in paragraph (f) above. Effluent quality which is found to not meet standards mustshall be reported to the maintenance entity for correction within 10 working days.

(h) Where slightly limited soil textures exist on a site, the required drainfield size may be reduced by 25 percent from the requirements in Rule 62-6.008(5) or Rule 62-6.009(3)(d), F.A.C. This shall 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, Aa manufacturer, distributor or seller of aerobic treatment units mustshall furnish, to the Onsite Sewage ProgramState Health

Office~~, in Microsoft Word document format, Portable Document Format (PDF) or other electronic format accepted by 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 ~~Class I~~ 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 receptacle 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 Office within 60 calendar days after receipt of a request for additional information. The Onsite Sewage Program~~State Health~~ Office will forward ~~these~~ completion reports and drawings to each DOH county health department. No aerobic unit will~~shall~~ 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 DOH county health departments and the Onsite Sewage Program~~State Health~~ Office.

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

(k) A manufacturer~~distributor~~ of a specific ~~manufacturer's~~ brand or model of an approved aerobic treatment unit must~~shall~~ provide to the DOH county health department and Onsite Sewage Program~~State Health~~ Office 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 ~~other~~ approved maintenance entities.

(l) ~~Where local building occupancy codes require that the DOH county health department~~

~~approve the means of sewage disposal prior to building occupancy or change of occupancy, and w~~Where an aerobic treatment unit is used~~utilized~~, a current, unexpired aerobic treatment unit maintenance contract between the property owner or lessee and an approved maintenance entity must~~shall~~ 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~~shall~~ be provided to the DOH county health department by the maintenance entity. The maintenance agreement must~~shall~~:

1. Initially be for a period of at least 2 years and subsequent maintenance agreement renewals must~~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 DOH county health 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~~shall~~, within 30 days of the service termination date, contract with an approved maintenance service and provide the DOH county health 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~~shall~~ be inspected four times per year.

(n) The maintenance entity must~~shall~~ furnish to the DOH county health department a report~~listing~~ of all aerobic treatment units inspected or serviced during the respective reporting period. As a minimum, reports must~~shall~~ 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~~shall~~ also include a list of the owners who have refused to renew their maintenance agreement.

(~~n~~o) The DOH county health department will~~shall~~, at least annually, inspect the maintenance

and performance of aerobic treatment units. The DOH county health department will~~shall~~ 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 1500 gallons per day, or a combination of aerobic treatment units treating flows according to Rule 62-6.004(4)(a) or (b), F.A.C., must~~shall~~ be designed and certified by an engineer licensed in the State of Florida. The design must~~shall~~ include an assessment of wastewater strength. The certification must~~shall~~ state that the unit is capable of consistently meeting, at minimum, secondary treatment standards for $CBOD_5$ and TSS established in Rule 62-6.025(12)(a), F.A.C. In addition, the following requirements must~~shall~~ also be met:

(a) The owner or lessee of a system must~~shall~~ 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~~shall be~~ 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~~shall~~ collect effluent quality samples and submit the sample analysis reports to the DOH county health department. Effluent quality samples for $CBOD_5$ and suspended solids must~~shall~~ be collected at least semi-annually and such samples must~~shall~~ be analyzed by a department-approved laboratory.

(c) Written sample analysis reports must~~shall~~ be submitted to the DOH county health department by no later than the 15th of the next month following the semi-annual sampling period. However, if the sample analysis for $CBOD_5$ or suspended solids exceeds secondary treatment standards by more than 100 percent, the maintenance entity or certified operator must~~shall~~ notify the DOH county health department by telephone or in person within 24 hours after receipt of sample analysis results.

(d) The DOH county health department mustshall monitor the maintenance and performance of aerobic treatment units as required by paragraph (om) above.

(4) No aerobic treatment unit mustshall 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 from the DOH county health department in the county where the service company is located. Each service entity mustshall 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, 02/10, herein incorporated by reference, mustshall be made to the DOH county health department and mustshall 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 mustshall 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 DOH county health 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 mustshall be reported by the approved aerobic unit maintenance entity, in writing, to the DOH county health department no later than 5 working days after the date of the emergency service.

(6) All materials incorporated herein may be obtained from the Bureau of Onsite Sewage Programs Office at www.MyFloridaEH.com or 4052 Bald Cypress Way, Bin A08, Tallahassee, Florida 32399-1713.

Rulemaking Authority 381.0065(3)(a), 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.

62-6.025 Definitions

Definitions in Chapter 62-6, Parts I and II, are also applicable to Chapter 62-6, Part IV.

(1) Bottom infiltrative surface - the vertical projection of the bottom surface of the drainfield that is no lower in elevation than 30 inches below grade.

(2) Composite sample –a defined mixture of grab samples of wastewater or effluent taken in proportion to either time or flow, to minimize the effect of the variability of the individual sample.

(3) Disposal component – arrangement of equipment and/or materials that distributes effluent within a drainfield

(4) Effluent – treated sewage at the point of discharge to the drainfield or disposal system. Where the site specific application proposes to use soil as component of the treatment system, effluent refers to the mixture of soil water, effluent and shallow groundwater recovered from the monitoring points and treatment concentration standards shall be decreased by 50 percent for $CBOD_5$, TSS, TN, and TP, and by 90 percent for fecal coliform, and percent removal standards of table IX shall be correspondingly adjusted. For systems designed to meet the standards of 62-6.017(4), effluent refers to the recovered water product from a sampling point following the final design treatment step.

(5) Failure - in addition to 62-6.002(23), exceedance by an individual sample of the applicable performance standards, unless the maintenance entity performs and documents maintenance, and a second individual sample is taken within 30 days of the first individual sample and meets the applicable individual performance standard.

(6) Grab sample - a sample which is taken from wastewater or effluent over a period of time not to exceed fifteen minutes.

(7) Effective drainfield depth - the vertical distance from the bottom of the drainfield to the invert of the distribution pipe.

(8) 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 $CBOD_5$ (carbonaceous biochemical oxygen demand), TSS (total suspended solids), TN (total nitrogen), TP (total phosphorus), and fecal coliform found in domestic or commercial sewage waste, to a specific and measurable established performance standard.

(9) Performance-based treatment system maintenance entity - any person or business entity which has obtained an annual written permit issued on Form DEP4013 from the DOH county health department in the county where the maintenance entity is located.

(10) Sidewall infiltrative surfaces - the horizontal projection of the drainfield measured from the invert of the drainfield distribution pipe to the bottom infiltrative surface, or to 30 inches below finished grade, whichever is less.

(11) Total drainfield depth - the vertical distance from the bottom of the drainfield to the top of the drainfield.

(12) Treatment component - any arrangement of equipment and/or material that treats sewage. A treatment component may coexist within or after a disposal component.

(13) Treatment performance standards -

(a) Performance standards for effluent from performance-based treatment systems consist of 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.

3. Percent removal – annual average removal of a pollutant from the discharge of the treatment system compared to the influent from the establishment. The influent stems from a septic tank or similar treatment compartment; percent removal= (1- effluent concentration/influent concentration)*100

(b) Treatment performance standards are established for five pollutants.

1. Carbonaceous biochemical oxygen demand after five days ($CBOD_5$), 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) Numerical values for several levels of common treatment performance standards for the five pollutants are defined in Table IX. Compliance during monitoring shall consist of meeting at least one of the three criteria. To achieve compliance the values determined from samples of the system shall be equal to or better than the treatment standards listed. For concentrations, better means lower, for percent removal, better means higher.

(14) Wastewater strength - the sum of the $CBOD_5$ and TSS concentrations.

TABLE IX
PERFORMANCE BASED TREATMENT SYSTEM STANDARDS

POLLUTANT	Domestic Sewage Waste Range	Baseline Septic Tank Effluent Standards	Baseline Soil Treatment Standard 24" Below Infiltrative Surface	Aerobic Treatment Unit Effluent Standards		Secondary Treatment Effluent Standards	Advanced Secondary Treatment Effluent Standards	Florida Keys Nutrient Reduction Standards	Advanced Wastewater Treatment Effluent Standards
				NSF40	NSF245				
$CBOD_5$ (mg/L)									
-annual average	300	150	10	20	20	20	10	10	5
-individual sample	500	300	20	60	60	60	30	30	10
-removal	NA*	NA	95%	90%	90%	90%	95%	95%	97%
TSS (mg/L)									
-annual average	200	100	30	20	20	20	10	10	5
-individual sample	500	200	100	60	60	60	30	30	10
-removal	NA	NA	85%	90%	90%	90%	95%	95%	97%
TN (mg/L)									
-annual average	100	100	70	NR**	20	NR	20	10	3
-individual sample	150	150	100		50		50	40	6
-removal	NA	NA	30%		50%		50%	70%	90%
TP (mg/L)									
-annual average	18	18	12	NR	NR	NR	10	1	1
-individual sample	25	25	18				20	4	2
-removal	NA	NA	30%				25%	50%	90%
Fecal coliform (cfu/100ml)									
-annual average	2.00E+06	2.00E+06	20	NR	NR	200	200	NR	1
-individual sample	2.00E+07	2.00E+07	200			800	800		25
-percent reduction	NA	NA	100.00%			99.99%	99.99%		100.00%

* 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 shall include provisions for rapid and uniform mixing; and the total chlorine residual of at least 1.0 mg/l shall be maintained at all times. The minimum acceptable contact time shall be 15 minutes at the peak hourly flow. No individual sample shall 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 shall include provisions for rapid and uniform mixing and a total chlorine residual of at least 0.5 mg/l shall be maintained after at least 15 minutes contact time at the peak hourly flow.

Footnote 3. Performance-based treatment systems (PBTS) may be permitted where Aerobic Treatment Units (ATU) are required, for example by county or city ordinance. An ATU not installed as a PBTS must comply with Rule 62-6.012, F.A.C.

~~(1) Advanced Secondary Treatment Standards: A wastewater system with the following operational criteria:~~

~~(a) $CBOD_5$ and TSS~~

~~1. The arithmetic mean of the $CBOD_5$ or TSS values for the effluent samples collected (whether grab or composite technique is used) during an annual period shall not exceed 10 mg/l.~~

~~2. The arithmetic mean of the $CBOD_5$ or TSS values for a minimum of four effluent samples, each collected (whether grab or composite technique is used)on a separate day during a period of 90 consecutive days (quarterly) shall not exceed 12.5 mg/l.~~

~~3. The arithmetic mean of the $CBOD_5$ or TSS values for a minimum of four effluent samples, each collected (whether grab or composite technique is used) on a separate day of seven consecutive days shall not exceed 15 mg/l.~~

~~4. Maximum-permissible concentrations of $CBOD_5$ or TSS values in any effluent grab sample at any time shall not exceed 20 mg/l.~~

~~(b) TN~~

~~1. The arithmetic mean of the TN values for the effluent samples collected (whether grab or composite technique is used) during an annual period shall not exceed 20 mg/l.~~

~~2. The arithmetic mean of the TN values for a minimum of four effluent samples, each collected (whether grab or composite technique is used)on a separate day during a period of 90 consecutive days (quarterly) shall not exceed 25 mg/l.~~

~~3. The arithmetic mean of the TN values for a minimum of four effluent samples, each collected (whether grab or composite technique is used) on a separate day of seven consecutive days shall not exceed 30 mg/l.~~

~~4. Maximum-permissible concentrations of TN values in any effluent grab sample at any time shall not exceed 40 mg/l.~~

~~(c) TP~~

1. The arithmetic mean of the TP values for the effluent samples collected (whether grab or composite technique is used) during an annual period shall not exceed 10 mg/l.

2. The arithmetic mean of the TP values for a minimum of four effluent samples, each collected (whether grab or composite technique is used)on a separate day during a period of 90 consecutive days (quarterly) shall not exceed 12.5 mg/l.

3. The arithmetic mean of the TP values for a minimum of four effluent samples, each collected (whether grab or composite technique is used) on a separate day of seven consecutive days shall not exceed 15 mg/l.

4. Maximum-permissible concentrations of TP values in any effluent grab sample at any time shall not exceed 20 mg/l.

(d) Fecal coliform - system operation shall result in not more than 200 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 0.5 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.

1. The arithmetic mean of the fecal coliform colonies collected during the annual period shall not exceed 200 per 100 ml of effluent.

2. 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 200 per 100 ml of sample.

3. No more than 10% of the samples collected during the period of 30 consecutive days shall exceed 400 fecal coliform colonies per 100 ml of sample.

4. Any one sample shall not exceed 800 fecal coliform colonies per 100 ml of sample.

(2) Advanced Wastewater Treatment Standards: A wastewater system with the following operational criteria:

~~(a) $CBOD_5$ and TSS~~

~~1. The arithmetic mean of the $CBOD_5$ or TSS values for the effluent samples collected (whether grab or composite technique is used) during an annual period shall not exceed 5 mg/l.~~

~~2. The arithmetic mean of the $CBOD_5$ or TSS values for a minimum of four effluent samples, each collected (whether grab or composite technique is used)on a separate day during a period of 90 consecutive days (quarterly) shall not exceed 6.25 mg/l.~~

~~3. The arithmetic mean of the $CBOD_5$ or TSS values for a minimum of four effluent samples, each collected (whether grab or composite technique is used) on a separate day of seven consecutive days shall not exceed 7.5 mg/l.~~

~~4. Maximum-permissible concentrations of $CBOD_5$ or TSS values in any effluent grab sample at any time shall not exceed 10 mg/l.~~

~~(b) TN~~

~~1. The arithmetic mean of the TN values for the effluent samples collected (whether grab or composite technique is used) during an annual period shall not exceed 3 mg/l.~~

~~2. The arithmetic mean of the TN values for a minimum of four effluent samples, each collected (whether grab or composite technique is used)on a separate day during a period of 90 consecutive days (quarterly) shall not exceed 3.75 mg/l.~~

~~3. The arithmetic mean of the TN values for a minimum of four effluent samples, each collected (whether grab or composite technique is used) on a separate day of seven consecutive days shall not exceed 4.5 mg/l.~~

~~4. Maximum-permissible concentrations of TN values in any effluent grab sample at any time shall not exceed 6 mg/l.~~

~~(c) TP~~

~~1. The arithmetic mean of the TP values for the effluent samples collected (whether grab or composite technique is used) during an annual period shall not exceed 1 mg/l.~~

2. The arithmetic mean of the TP values for a minimum of four effluent samples, each collected (whether grab or composite technique is used)on a separate day during a period of 90 consecutive days (quarterly) shall not exceed 1.25 mg/l.

3. The arithmetic mean of the TP values for a minimum of four effluent samples, each collected (whether grab or composite technique is used) on a separate day of seven consecutive days shall not exceed 1.5 mg/l.

4. Maximum-permissible concentrations of TP values in any effluent grab sample at any time shall not exceed 2.0 mg/l.

(d) Fecal coliform - system operation shall result in an effluent in which fecal coliform colonies (per 100 ml of sample) are below detectable limits. Where chlorine is used for disinfection, the design shall include provisions for rapid and uniform mixing; and the total chlorine residual of at least 1.0 mg/l shall be maintained at all times. The minimum acceptable contact time shall be 15 minutes at the peak hourly flow. To determine compliance of a system, the following operational criteria (using either MF or equivalent MPN methods) shall be applicable

1. Fecal coliform shall be below the detection limits for 75% of the samples collected over a 30 day period.

2. Any one sample shall not exceed 25 fecal coliform colonies per 100 ml of sample.

3. Any one sample shall not exceed 5.0 mg/l of TSS at a point before application of the disinfectant.

(3) Baseline system standards- A wastewater system with the following operational criteria:

(a) Effluent concentrations from the treatment tank:

1. $CBOD_5$ - <240 mg/l

2. TSS - <176 mg/l

3. TN - < 45 mg/l

4. TP - < 10 mg/l

(b) Percolate concentrations from the baseline system prior to discharge to groundwater:

1. $CBOD_5$ - <5 mg/l

2. TSS - <5 mg/l

3. TN - < 25 mg/l

4. TP - <5 mg/l

(4) Bottom infiltrative surface - the vertical projection of the bottom surface of the drainfield that is no lower in elevation than 30 inches below grade.

(5) Composite sample - means a combination of individual samples of wastewater or effluent taken at selected intervals, generally hourly or less for some specified period, to minimize the effect of the variability of the individual sample.

(6) Grab sample - a sample which is taken from a wastestream without regard to the flow in the wastestream and over a period of time not to exceed fifteen minutes.

(7) Effective drainfield depth - the vertical distance from the bottom of the drainfield to the invert of the distribution pipe.

(8) Florida Keys nutrient reduction 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:

1. Biochemical Oxygen Demand ($CBOD_5$) - 10 mg/l

2. Suspended Solids - 10 mg/l

3. Total Nitrogen, expressed as N - 10 mg/l

4. Total Phosphorus, expressed as P - 1 mg/l

(9) Innovative System – as defined by s. 381.0065(2)(g), F.S.

(10) 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 $CBOD_5$ (carbonaceous biochemical oxygen demand), TSS (total suspended solids), TN (total nitrogen), TP (total phosphorus), and fecal coliform found in domestic sewage waste, to a specific and measurable established performance standard. This term also includes innovative systems.

(11) Performance System Maintenance Entity - any person or business entity which has been issued a written permit by the county health department and has been authorized by the design engineer or manufacturer of all treatment components used in the performance-based treatment system and provides operation and maintenance services associated with performance-based treatment system.

(12) Secondary Treatment Standards: A wastewater system with the following operational criteria:

(a) $CBOD_5$ and TSS

1. The arithmetic mean of the $CBOD_5$ or TSS values for the effluent samples collected (whether grab or composite technique is used) during an annual period shall not exceed 20 mg/l.

2. The arithmetic mean of the $CBOD_5$ or TSS values for a minimum of four effluent samples, each collected (whether grab or composite technique is used) on a separate day during a period of 30 consecutive days (monthly) shall not exceed 30 mg/l.

3. The arithmetic mean of the $CBOD_5$ or TSS values for a minimum of four effluent samples, each collected (whether grab or composite technique is used) on a separate day of seven consecutive days shall not exceed 45 mg/l.

4. Maximum-permissible concentrations of $CBOD_5$ or TSS values in any effluent grab sample at any time shall not exceed 60 mg/l.

(b) Fecal coliform - system operation shall result in not more than 200 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 0.5 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 equivalent MPN methods) are applicable.~~

~~1. The arithmetic mean of the fecal coliform colonies collected during the annual period shall not exceed 200 per 100 ml of effluent.~~

~~2. The geometric mean of the fecal coliform colonies for a minimum of 10 samples of effluent, each collected on a separate day, shall not exceed 200 per 100 ml of sample.~~

~~3. No more than 10% of the samples collected during a period of 30 consecutive days shall exceed 400 fecal coliform colonies per 100 ml of sample.~~

~~4. Any one sample shall not exceed 800 fecal coliform values per 100 ml of sample.~~

~~(13) Sidewall infiltrative surfaces - the horizontal projection of the drainfield measured from the invert of the drainfield distribution pipe to the bottom infiltrative surface, or to 30 inches below finished grade, whichever is less.~~

~~(14) Total drainfield depth - the vertical distance from the bottom of the drainfield to the top of the drainfield.~~

~~(15) Wastewater strength - the sum of the $CBOD_5$ and TSS concentrations in the effluent.~~

Rulemaking Authority 381.0011(4), (13), 381.0065(3)(a), FS. Law Implemented 381.0065, 381.0067, 386.041, FS. History—New 2-3-98, Amended 3-22-00, 06-18-03, 11-26-06, XX-XX-XX.

62-6.026 Applications for Performance-Based Treatment ~~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) and (3) renumbered to (1) and (2) No change.

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, XX-XX-XX.

62-6.027 Permits.

~~(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) Renumbered to (1) No change.

(2~~3~~) Within 15 working days after the department receives a completed application for a performance-based treatment system, the county health department must either issue a permit for the system or must~~shall~~ notify the applicant that the system does not comply with the performance criteria, and refer the application to the ~~Bureau of~~ Onsite Sewage Program~~s~~ Office, who must~~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 ~~Bureau of~~ Onsite Sewage Program~~s~~ Office must~~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 county health department and referred to the Bureau of Onsite Sewage Programs for review and approval, disapproval or approval with modifications.~~

(4) through (7) Renumbered to (3) to (6) No change.

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, XX-XX-XX.

~~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 Bureau of Onsite Sewage Programs. 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 county health departments 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 Bureau of Onsite Sewage Programs 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.*~~Renumbered to 62-6.0152 XX-XX-XX.

62-6.030 Fees.

(1) The following fees are required for services provided by the department.

(a) through (r) No change.

(s) Septage storage ~~stabilization~~ tank inspection fee per annum per tank $150.00

(t) Septage and food establishment storage tank inspection for additional tanks not already permitted or tanks being removed – per tank ~~disposal site evaluation fee per annum~~. $100.00~~200.00~~

(u) through (x) No change.

(2) No change.

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, _____.

Department of Health Protocol on Innovative System Permits
October 2019

1. INTRODUCTION

This Protocol establishes the requirements for innovative system permits (ISPs) in accordance with Rule 62-6.0152, Florida Administrative Code (FAC), and DH Form 3143.

2. DEFINITIONS

As used in the protocol, the words or terms have the following meanings:

(1) **Disposal component**: arrangement of equipment and/or materials that distributes effluent within a drainfield.
(2) **Independent**: no employee/employer or subsidiary relationships or other relationships that would impact the independence of an entity collecting data from the innovative system permit applicant.
(3) **Reliability target**: the frequency of test system observations required to show that the proposed technology meets the proposed performance level reliably as described in Section 5 of this document.
(4) **Proposed performance level**: the specific performance measure identified in the test plan that the applicant claims the proposed technology can meet and that is being evaluated during innovative system testing.
(5) **Proposed technology:** materials, devices or techniques proposed by the applicant to be installed and tested and that serve in whole or in part in an onsite sewage treatment and disposal system. The technology is characterized as a system treatment component, system disposal component, both, or other.
(6) **Proprietary technology:** a proposed technology protected by patent or trademark.
(7) **Public domain technology:** a proposed technology not protected by patent or trademark.
(8) **Testing organization:** the entity that implements testing of the proposed technology.
(9) **Test plan:** a written document that describes the procedures for innovative system testing as described in Section 3.G of this document.
(10) **Test system:** an installation of the proposed technology for the purposes of innovative system testing.
(11) **Tested parameter:** an observation of interest required to evaluate whether a test system can meet the proposed performance level in accordance with the reliability target, such as effluent concentration, sewage disposal, or other applicable measurable and specific measure of functioning.
(12) **Treatment component:** any part of an innovative system that is intended by the applicant to provide sewage treatment. A treatment component may coexist within or after a disposal component.

3. INNOVATIVE SYSTEM APPLICATION REQUIREMENTS

Application for an ISP must include all items required by Rule 62-6.0152, FAC, and Form DH 3143, 08/19. Requirements for items on Form DH 3143 are listed below.

A. DATA FROM PREVIOUS TESTING

Data from previous testing must include all known results from testing on performance and reliability of the proposed technology, including observations of failure as defined by Rule 62-

6.002, FAC. For treatment components, reported results must include all individual sampling data, average, median, concentrations and flows. For disposal components, reported results must include all measurements of water levels within the disposal component, estimated or measured hydraulic and biological loading rates, and surfacing observations. The data must meet minimum requirements in section 4.

B. AN AFFIDAVIT BY THE APPLICANT CERTIFYING THAT THE TECHNOLOGY SUBMITTED FOR APPROVAL IS THE SAME AS THE TECHNOLOGY FOR WHICH TESTING DATA ARE PROVIDED.

If there are differences between the technology as it was tested and the technology as it is submitted for approval, the applicant must identify this to the department.

C. DESIGN CRITERIA

Design criteria must include a description of the proposed technology and its function mechanism, detailed design drawings, structure, material specifications, drawings of the configuration or configurations of the proposed technology to be tested, the design treatment capacity, and the proposed performance level. Configuration describes variations in the geometry, elevation and influent supply, such as installations in subsurface, filled or mound systems, trench or bed geometry, and gravity, lift-dosing or low-pressure dosing influent supply. The design criteria must address sizing the technology to estimated sewage flows ranging from 200 to 5000 gallons per day and to differing domestic and commercial wastewater strengths and characteristics. For disposal components, the design criteria must also include a comparability rating calculated as the ratio of the absorption surface of mineral aggregate to the absorption surface of the disposal component.

D. PRODUCT LITERATURE

Product literature must include the following:

1. An owner's manual including the system's model designation; a functional description of system operation; a list of household substances that could adversely affect the system or the environment; operating instructions, methods to be used to identify system malfunction; electrical schematics (if applicable); instructions for extended periods of non-use; and a description of service policies.
2. An installation manual, including a process overview; a list of components, electrical wiring schematics (if applicable); installation requirements and procedures, repair or replacement instructions; and detailed start-up procedures.
3. An operation and maintenance manual, including a maintenance schedule (if required), detailed procedures for evaluation of system components and system effluent, and methods for collecting effluent samples for treatment components. It must also include a trouble shooting guide, a guide for repairing and replacing all system components, and a template of a maintenance contract as described in Rule 62-6.0152(4), FAC.
4. Inspection procedures previously used by the applicant to inspect the test system installation to ensure it is properly installed.

The applicant must provide product literature that complies with departmental regulations.

E. WARRANTY.

A warranty by the applicant to the owner of an installed test system must provide and pay all costs for system permitting, engineering services, contractor equipment, and material and labor necessary to secure permits and install department-approved non-innovative system meeting new system requirements. The duration of the warranty must be for five years from the date of final approval of the installed test system or for the duration of testing, whichever happens first.

F. CONSUMABLES MEETING REQUIREMENTS OF RULE 62-6.0151, FAC, AND ESTIMATED REPLACEMENT INTERVALS AND METHODS, IF APPLICABLE

G. TEST PLAN

All test plans must identify the testing organization and provide testing protocols. The testing organization must be independent and have knowledge and experience in conducting such testing.

Test plans must include the proposed performance level and tested parameter of the system to be tested. The proposed performance level for treatment components must include at least one annual average/individual sample level for at least one of the parameters specified in Rule 62-6.025(8), FAC, and no failure of the system as defined in Rule 62-6.002, FAC. The proposed performance level for disposal components, at a minimum, will be that water levels measured within the disposal component will not exceed six inches above the absorption surface and no failure of the system as defined in Rule 62-6.002, FAC. Some technologies may require additional other test parameters and performance levels depending on their design and treatment levels.

Procedures to address system malfunction and replacement, premature termination of the testing protocol and innovative system evaluation, and criteria for removal of the system at the end of the evaluation or warranty period must also be provided.

Test plans must address the following: method of water use monitoring, sampling/monitoring points for all measurements to obtain complete and representative observations, sampling/monitoring procedures, testing schedule and duration, and field observations including indicators of failure. Where a single component is intended to provide both treatment and disposal functions, the applicant must adhere to the disposal component criterion for the number of tested systems.

Test plans will vary depending on data from previous testing. The following sections apply to technologies that meet requirements of 4.A. Where only the requirements of 4.B. are met, one system must be tested in Florida first to generate data meeting the requirements of 4.A. In this situation, the test plan must include a section with the preliminary testing procedures to achieve this data quality. The one system tested in Florida must achieve the proposed performance level before expanding testing as described below.

I. TESTING FOR TREATMENT COMPONENT EFFECTIVENESS

Testing for treatment component performance effectiveness must provide valid influent and effluent sampling data from a minimum of four quarterly testing events gathered from each of at least three test systems. If influent sampling is demonstrated by the applicant not to be feasible, nutrient removal effectiveness may be assessed assuming average total nitrogen concentrations and total phosphorus concentrations of 55 and 10 mg/L, respectively. Quarterly testing events must occur at least 10 weeks and no more than 16 weeks apart. Test plans must identify the standard methods proposed for the analysis of each test, which parameters will be analyzed in the laboratory, which parameters will be measured in the field, and which laboratory

will be used. The laboratory identified for testing must either be accredited by a recognized National Environmental Laboratory Accreditation Program (NELAP) accreditation body or maintain a comprehensive quality assurance program that, at a minimum, complies with the requirements of ISO/IEC Guide 17025 General Requirements for the Competence of Calibration and Testing Laboratories, and demonstrate it is qualified to perform the assigned analyses in accordance with required methods. Test plans for treatment components must include submission of a quality assurance project plan (QAPP). The QAPP must include blank and duplicate sample collection procedures in the amount of at least 10 percent and chain of custody procedures.

II. TESTING FOR DISPOSAL COMPONENT EFFECTIVENESS

Testing for disposal components must result in valid measurements of water levels within the disposal component from a minimum of four viable quarterly testing events gathered from at least 15 test systems. Quarterly testing events must occur at least 10 weeks and no more than 16 weeks apart.

At least one system each must be tested in moderately and slightly limited soil textures. Not all combinations of soil textures and configurations must be tested. If the proposed comparability rating varies by soil texture or configuration, at least 80 percent of the systems must be tested in the soil texture and configuration combination with the highest comparability rating.

H. AN EVALUATION REPORT BY AN INDEPENDENT THIRD-PARTY TESTING ORGANIZATION OR A FLORIDA LICENSED ENGINEER

4. REQUIREMENTS FOR DATA FROM PREVIOUS TESTING

Data from previous testing must either meet requirements of 4.A. or meet requirements of 4.B. Where only the requirements of 4.B. are met, one system must be tested in Florida first to evaluate if it will meet the proposed performance level and requirements of 4.A for data from previous testing.

A. REQUIREMENTS FOR DATA FROM PREVIOUS TESTING – LEVEL A

The data must meet **all** the following conditions:

(a) Full-scale testing with an average measured daily domestic or commercial strength sewage waste flow as defined by Rule 62-6.003(13) and (15), FAC, of at least 200 gallons per day and not more than 5000 gallons per day.

(b) The results of previous testing include all influent and performance observations conditions for at least one test system. Treatment component testing must include influent and effluent observations within ten or more weeks for a duration of over 181 or more days. Disposal component testing must include at least monthly observations for at least 12 months.

The results must show that the average of each test system meets the proposed performance level and the minimum number of individual data points meet the designated performance level as required by Tables 2 and 3 in Section 5.

(c) The testing of the system must meet all of the following criteria:

i) The testing organization is independent. The testing organization must provide all data to the Onsite Sewage Program Office.

ii) The testing organization has knowledge and experience in conducting such testing. Testing during EPA's national demonstration projects or testing by government agencies and contractors for government agencies that regulate onsite sewage components or wastewater treatment will be deemed to comply. Testing by entities that perform certification testing for organizations accredited to ISO/IEC 17065:2012 (Conformity assessment - Requirements for bodies certifying products, processes and services) also will be deemed to comply. Other entities, including department-accredited analytical laboratories, faculty or staff of an accredited college or university, must provide documentation demonstrating staff competence, knowledge and experience in environmental testing.

iii) The testing protocol and its implementation are documented and provide standardized procedures and standards to show how objectives such as completeness, accuracy and precision are met. Testing according to ANSI-standards or certification standards required for approval in other states or countries, or during EPA's national demonstration projects shall be deemed to comply with this criterion. Documentation for testing of treatment components must include chain-of-custody procedures and certification of analytical laboratories providing data as described in 3.G, if applicable.

B. REQUIREMENTS FOR DATA FROM PREVIOUS TESTING – LEVEL B

The results of previous testing include all influent and performance observations for at least one test system. Treatment component testing must include influent and effluent observations. Test data meets Level B requirements if the following criteria are met: a) the test system achieves the proposed performance level as described in section 3.G; b) using the following scoring criteria, the data set scores at least 10 if it is a treatment component and at least eight if it is a disposal component (sampling and lab criteria do not apply); and c) the dataset cannot score a zero on any attribute. Data must be associated with domestic strength sewage, unless the component is specifically intended for different strengths.

Scoring criteria: For each data set attribute, calculate assign the point rating. Sum up point ratings for all attributes.

Point rating (PR)	Sewage	Tested flows	Amount of data collected on test parameter*	Qualifications and independence of entity collecting data	Sampling documentation and lab documentation (if applicable)
PR = 0	Non-sewage	< 1 gpd	Data collected within less than five calendar weeks over a duration of less than 90 days	Unknown or data collected by sampler with no training	Unknown or undocumented sampling and lab procedures
PR = 1	Synthetic sewage	1 up to 20 gpd	Data collected within five to seven calendar weeks and over a duration of 91-120 days	Data collected by trained personnel of applicant or other non-independent entity	Sampling and lab procedures are documented, but not consistent with standard methods as published by the American Public Health Association or Environmental Protection Agency
PR = 2	Real sewage off-site	20 to <200 gpd, or > 5,000 to 50,000 gpd)	Data collected within eight to ten calendar weeks and over a duration of 121-180 days	Data collected by independent entity with training.	Sampling and lab procedures are documented, and consistent with standard methods as published by the American Public Health Association or Environmental Protection Agency
PR = 3	Real sewage on-site	≥200 to 5,000 gpd	Data collected within ten or more calendar weeks over a duration of 181 or more days	Data collected by independent entity with experience complying with requirements of 4.A.(c),ii	Sampling procedures are documented and consistent with 4.A.(c).iii. Lab is certified to NELAP or ISO.

*A calendar week is a block of seven days beginning with Sunday and ending with Saturday. If only one condition is met, the lower point rating will apply.

5. DATA REQUIREMENTS FOR CLASSIFICATION

Data collected on test systems during innovative testing must meet reliability targets for the proposed performance level specified in the test plan to pass innovative system testing.

1. TREATMENT COMPONENT RELIABILITY TARGETS

For treatment components to pass innovative system testing, they must a) achieve the annual average reliability target and b) achieve the individual sample reliability target specified in the test plan.

I. ANNUAL PERFORMANCE STANDARD TARGETS

For each test system, the median of each tested parameter must be compared to the annual average proposed performance level to determine if the level is achieved or not. The minimum number of test system medians must meet the annual average proposed performance level according to Table 1.

II. INDIVIDUAL SAMPLE RELIABILITY TARGETS

Each individual test parameter result must be compared to the individual sample proposed performance level to determine if the level is met for each individual sample. The minimum number of individual samples must meet the individual proposed performance level according to Table 2.

2. DISPOSAL COMPONENTS TARGET

The results of each test system will be compared to the proposed performance level. The minimum number of individual samples must meet the proposed performance level according to Table 3.

TABLE 1. ***MINIMUM NUMBER OF TEST SYSTEM MEDIANS REQUIRED TO MEET THE ANNUAL PROPOSED PERFORMANCE LEVEL*(TREATMENT COMPONENTS)***

Total Number of Test Systems	Number of Test System Medians Required to Meet the Proposed Performance Level (Annual)		Total Number of Test System	Number of Test System Medians Required to Meet the Proposed Performance Level (Annual) **
3	3		31	20
4	4		32	20
5	4		33	21
6	5		34	21
7	6		35	22
8	6		36	22
9	7		37	23
10	8		38	23
11	8		39	24
12	9		40	25
13	9		41	25
14	10		42	26
15	10		43	26
16	11		44	27
17	12		45	27
18	12		46	28
19	13		47	28
20	13		48	29
21	14		49	29
22	15		50	30
23	15		51	31
24	16		52	31
25	16		53	32
26	17		54	32
27	17		55	33
28	18		56	33
29	18		57	34
30	19		58	34

**The target is to be 90 percent confident that more than 50 percent of data points meet the proposed performance level. Median system treatment performance compared to average treatment standard in Rule 62-6.025, FAC.*

*** Based on normal approximation to the binomial distribution. For larger number of system tested use (minimum meeting=round (number systems *(0.5+1.28*Sqrt(0.5*(1-0.5)/number systems))+0.5).*

TABLE 2. ***MINIMUM NUMBER OF DATA POINTS REQUIRED TO MEET THE INDIVIDUAL PROPOSED PERFORMANCE LEVEL*(TREATMENT COMPONENTS)***

Total Number of Individual Data Points	Number of Data Points Required to Meet the Proposed Performance Level (Individual)		Total Number of Individual Data Points	Number of Data Points Required to Meet the Proposed Performance Level (Individual)**
10	10		40	34
11	11		41	35
12	11		42	36
13	12		43	36
14	13		44	37
15	14		45	38
16	15		46	39
17	16		47	40
18	16		48	40
19	17		49	41
20	18		50	42
21	19		51	43
22	20		52	43
23	20		53	44
24	21		54	45
25	22		55	46
26	23		56	47
27	24		57	47
28	24		58	48
29	25		59	49
30	26		60	50
31	27		61	51
32	28		62	51
33	28		63	52
34	29		64	53
35	30		65	54
36	31		66	55
37	32		67	55
38	32		68	56
39	33		69	57

**The target is to be 90 percent confident that more than 75 percent of the data points meet the proposed performance level. Grab sample treatment performance compared to grab sample standard in Rule 62-6.025, FAC.*

*** Based on normal approximation to the binomial distribution. For larger number of data points use (minimum meeting=round (number systems *(0.75+1.28*Sqrt(0.75*(1-0.75)/number systems))+0.5).*

TABLE 3. ***MINIMUM NUMBER OF SYSTEMS REQUIRED TO MEET THE PROPOSED PERFORMANCE LEVEL (DISPOSAL COMPONENTS)***

Total Number of Test Systems	Number of Systems Required to Meet the Proposed Performance Level		Total Number of Test Systems	Number of Systems Required to Meet the Performance Level**
15	15		42	41
16	16		43	42
17	17		44	43
18	18		45	44
19	19		46	45
20	20		47	45
21	21		48	46
22	22		49	47
23	23		50	48
24	24		51	49
25	25		52	50
26	26		53	51
27	27		54	52
28	28		55	53
29	29		56	54
30	30		57	55
31	31		58	56
32	31		59	57
33	32		60	57
34	33		61	58
35	34		62	59
36	35		63	60
37	36		64	61
38	37		65	62
39	38		66	63
40	39		67	64
41	40		68	65

**The target is to be 90 percent confident that more than 90 percent of the data points meet the proposed performance level. System hydraulic functioning without excessive ponding.*

*** Based on normal approximation to the binomial distribution. For larger number of data points use (minimum meeting=round (number systems *(0.9+1.28*Sqrt(0.9*(1-0.9)/number systems))+0.5).*

STATE OF FLORIDA
DEPARTMENT OF HEALTH
INNOVATIVE SYSTEM PERMIT ~~ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM TEMPORARY PERMIT~~ APPLICATION

Business Name_____

Applicant Contact Name_____ Phone #_____
(Last, First, M.I. ~~or Business Name~~)
Email Address_____ Fax #_____

~~Applicant~~ Mailing Address:_____
(Street Address or P.O. Box) ~~(Business name)~~
_____
~~(Street Address or P.O. Box)~~ (City) (State) (Zip)

Authorized Agent Name (if applicable)_____ Phone #_____
(Last, First, M.I. or Business Name)
Email Address_____ Fax #_____

Mailing Address:_____
(Street Address or P.O. Box)
_____
(City) (State) (Zip)

1. Identify the proposed technology for innovative testing, and if it is a sewage treatment component, disposal component, both, or other. ~~List name, type and model number of innovative system or product~~ (may ~~A~~attach by addendum). Only one product per application. Applications are not transferrable.
_____
_____
_____

2. Supply the following ~~minimum~~ information (for requirements for these items, refer to Section 3 of the department's Protocol on Innovative Systems, October 2019):
- A) Data from previous testing~~Research and development studies~~;
- B) An affidavit by the applicant certifying that the technology submitted for approval is the same as the technology for which testing data are provided~~Results of previous testing~~;
- C) Design criteria ~~and installation criteria~~;
- D) Product literature~~Performance and reliability data~~;
- E) Warranty~~A disinterested third party certifier report, or a Florida Registered Engineer report~~;
- F) Consumables meeting requirements of Rule 64E-6.0151, Florida Administrative Code (FAC) and estimated replacement intervals and methods, if applicable~~Copy of system or product warranty:~~.
- G) Test plan;
- H) An evaluation report by an independent third-party testing organization or a Florida-licensed engineer.

3. A fee in accordance with the current fee schedule ~~will be charged upon application~~ for an innovative system permit application. ~~If the above information is not available or determined to be insufficient by the department and a temporary permit is issued for further testing and monitoring then a fee in an amount not to exceed $25,000.00 as authorized under section 381.0066, Florida Statutes, will be agreed upon prior to application approval. This fee covers the department's cost associated with the performance evaluation of the innovative system or product~~.

I affirm the information contained in this application is true, to the best of my knowledge.

Signature of a~~A~~pplicant ~~signature~~ or authorized agent~~representative~~ of applicant ~~:, if applicant is other than an individual~~:_____

Title:_____

Date:_____

FOR OSP OFFICE USE ONLY	Notes: _____ _____ _____ _____	Application Check No._____ Date of Application Check:_____ Check Amount: $_____

Instructions for Form DH 3143

All information must be legible.

Applicant contact name: the person serving as a contact to the company.

If the applicant authorizes an agent, they must do so in writing. Should the authorized agent who signed the application cease their association with the applicant or business, the applicant must immediately notify the Onsite Sewage Program Office of the change and supply the name(s) of any other person they intend to act as an authorized agent, if any.

1. Identify the system.
2. For requirements for these items, refer to section 3 of the department's Protocol on Innovative Systems, October 2019.
3. See Rule 64E-6.030, FAC, for fees.

DEPARTMENTAL USE ONLY

1) Application Number:_____
2) Application Received By:_____ Date:_____
3) Reviewed By:_____ Date:_____
4) Additional Information Requested..... Y/N Date:_____
   Information Needed:_____
5) Application Complete ..... Y/N Date:_____
   Application Approved..... ☐ Date:_____
7) Temporary Permit Issued..... Y/N Date:_____
8) Application Denied ..... ☐ Date:_____
   Reason for Denial:_____

Reviewed By:_____ Date:_____
Title:_____

STATE OF FLORIDA
DEPARTMENT OF HEALTH
PROPERTY OWNER ACKNOWLEDGEMENT OF INNOVATIVE SYSTEM INSTALLATION FORM

_____ _____
(date)

_____County Health Department

_____
(Street Address or P.O. Box)

_____
(City) (State) (Zip)

Attention: Environmental Health Director or
OSTDS Program Coordinator

I(print name(s)) _____, property owner(s) of the residence or business property located at (give ~~physical location or~~ street address or legal description if street address is not available):

_____

~~_____,~~

~~_____,~~

understand that the proposed Onsite Sewage Treatment and Disposal System to serve my property is permitted as an innovative system by the Department of Health (DOH).

I agree to allow staff~~agents~~ of the DOH~~Florida Department of Health, the manufacturer ,and~~ its~~the~~ local County Health Department (CHD), and the manufacturer to enter my property during normal working hours or any other agreed upon time~~at reasonable hours~~ for the purpose of monitoring this system.

I agree that I will not hold DOH or its local~~or the~~ _____ CHD responsible if this innovative system malfunctions.

I agree that I will notify the local _____ CHD of any problems, ~~or~~ malfunctions or failure I observe or am made aware of with this innovative system.

I agree that I will notify the manufacturer and the local CHD if there is a change of property ownership.

I also understand that if the innovative system fails within the warranty~~five year testing~~ period, as required in the department's Protocol on Innovative Systems, October 2019, the

manufacturer of the test system will be responsible for all costs necessary to remove the failed system (if needed) and install a ~~providing a certified installer who will provide contractor equipment, material and labor necessary to modify the system or repair the system with~~ an DOH-approved system complying with all new construction standards~~at no additional cost to me~~. It is also my understanding that I will be responsible for landscape restoration if a new DOH-approved system is to be installed. For the purposes of this evaluation, failure of a system is~~shall be~~ defined as: a) by section 64E-6.002, F.A.C.; b) creating a sanitary nuisance as defined by chapter 386, Florida Statutes; or c) the test system fails to function to the manufacturer's specifications as approved in the innovative system permit.~~as any system that meets one or more of the following criteria: 1) systems that have been increased in size after installation for reasons other than erroneous application information; 2) systems that experience effluent surfacing and sewage backing up into the house plumbing; and 3) systems described by homeowner as having a sluggish performance during wet weather or observed to have soggy, waterlogged soils above the drainfield attributed to sewage effluent. The failure definition shall include persistent electrical or mechanical device malfunctions. It is also my understanding that I will be responsible for landscape restoration.~~

Acknowledged~~Sincerely~~,

_____

Property Owner Name(s) (printed)

_____

Property Owner Signature(s)

_____

Date

Instructions for completing Form DH 3144.

All information must be legible.

This form must be completed by the owner of the property where the innovative system will be installed for testing. If the property owner is a business, the printed name above the signature line must include the business and the contact name of the person filling out the form on behalf of the business.