TECHNICAL REVIEW AND ADVISORY PANEL

ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS

ADVISORY TO THE DEPARTMENT OF HEALTH

AUTHORITY: SECTION 381.0068, FLORIDA STATUTES

TECHNICAL REVIEW AND ADVISORY PANEL (TRAP) MEETING

DATE: Thursday, February 28, 2019 TIME: 10:00 a.m. Eastern Time

PLACE: Betty Easley Conference Center

4075 Esplanade Way, Tallahassee, FL

Conference Room 152

Or by Conference call meeting

Teleconference Phone Number: 888-585-9008

At the prompt, enter the

Conference Code: 200-983-436 #

THIS MEETING IS OPEN TO THE PUBLIC.

Agenda

- Introductions
- 2. Review minutes of April 21, 2017 meeting
- 3. Old Business None.
- 4. New Business
 - a. Election of Chair and Vice-Chair
 - b. Rule development language for CH. 64E-6, FAC.
 - c. 2019 Legislative Updates
- 5. Other items of interest to the Technical Review and Advisory Panel
- 6. Public Comment

Scott Johnson
Professional Engineer

Vacant Real Estate Industry Dewayne Bingham, Jr. Septic Tank Industry

Ron Davenport Septic Tank Manufacturer

Glenn W. Bryant

DOH County Health Department

Robert Washam Consumer Scott Franz Soil Scientist Elias Christ Environmental Health

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ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS

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AUTHORITY: SECTION 381.0068, FLORIDA STATUTES

TECHNICAL REVIEW AND ADVISORY PANEL (TRAP) MEETING MINUTES

DATE: Thursday, February 28, 2019

PLACE: Betty Easley Conference Center, Tallahassee, FL and

Conference Call

Members present were:

Ken Odom, Home Building Industry, Chair Roy Pence, Home Building Industry, Vice Chair Glenn Bryant, County Health Department Robert Washam, Consumer Representative Dewayne Bingham, Jr., Septic Tank Industry Elias Christ, Environmental Health

Alternate members present:

Scott Johnson, Florida Engineering Society Joseph Sullivan, Soil Scientist

Department of Health staff present:

Ed Barranco, Environmental Administrator Robin Eychaner, Environmental Administrator Eberhard Roeder, Engineer David Hammonds, Environmental Consultant Ed Williams, Environmental Consultant Debby Tipton, Environmental Consultant

Absent members and alternates:

Ronald Oakley, Local Government Mark Ron Davenport, Septic Tank Manufacturer Scott Franz, Soil Scientist

Others present:

Denworth Cameron, Presby Environmental Bart Harris, Department of Health (DOH) Orange Gerald Robinson, DOH Polk Roxanne Groover, Florida Onsite Wastewater Assoc. (FOWA) Douglas Buck, Florida Home Builders Andrea Samson, Coalition for Property Rights

1. CALL TO ORDER

After Roll call, Chairman Odom called the meeting to order at 10:08 a.m. and invited the members and Department staff present to introduce themselves. Seven member-represented groups were present, representing a quorum.

2. REVIEW MINUTES OF LAST MEETING

The TRAP reviewed the minutes of the Friday April 21, 2017 meeting conference call. Ken asked if anyone has any comments on Issue 16-03 and none were heard.

Scott Johnson Vacant Dewayne Bingham, Jr. Ron Davenport
Professional Engineer Real Estate Industry Septic Tank Industry Septic Tank Manufacturer

Glenn W. Bryant Robert Washam Scott Franz Elias Christ

DOH County Health Department Consumer Soil Scientist Environmental Health

Ronald Oakley Ken Odom Roy Pence
Local Government Home Building Industry Home Building Industry

Scott Johnson made the motion to approve the minutes and Elias Christ made a motion to second. Motion passed, none opposed.

3. OLD BUSINESS

None.

4. NEW BUSINESS

Election of Chair and Vice Chair: Ken Odem indicated he cannot act as the Chair Person at this time and mentioned he may be able to handle the Vice Chair, but has some family obligations at this time for an ill parent.

Issue 19-04 Basin Management Action Plan (BMAP) adoption

Ed Barranco introduced Issue 19-04 for Basin Management Action Plan (BMAP) adoption in rule section 64E-6.001(4), of the Florida Administrative Code (FAC).

Will Bryant, recognized to comment, indicated this is just putting into rule what is already required by law.

MOTION to accept Issue 19-04 with Will Bryant's clarification by Scott Johnson and seconded by Will Bryant.

PASSED unanimously. Motion Carried and issue approved as submitted.

Issue 19-01 Nitrogen-Reducing Media Lined Drainfields

Ed Barranco introduced Issue 19-01 for Nitrogen-Reducing Media Lined Drainfields in rule section 64E-6.009, of the Florida Administrative Code (FAC). Defining what a standard in-ground nitrogen-reducing biofilters (INRB) is (without a liner), indicate what are the expected reductions are for these systems, and introducing an engineer designed INRB layer with a liner and underdrain. This was discussed in previous TRAP Issue 15-02, which had other variants. However, the Department decided to move forward with the most basic, reliable, and simplified variant. Now the Department would like to adopt a liner variant to increase options for INRB systems.

MOTION to discuss Issue 19-01 by Joe Sullivan and seconded by Ken Odom.

Question/comments read by Joe Sullivan, from Scott Franz, who was unable to attend the meeting. Have the systems outlined in the proposed language been researched? Are those research and tests available to the committee? The media that is theoretically supposed to stay mixed how is the mixing of fine textured soils in with wood chips create a saturated zone?

Roxanne Groover. Are these liner systems always going to have a professional engineer (PE) required? The proposed language also includes the designer too.

Ed Barranco indicated the intent is to always require a PE, because of the perimeter loading rates, which we don't have with the current INRB. To answer the previous questions, the research is available on our website. This includes research by DOH and those the Department of Environmental Protection (DEP) has done on similar systems. In addition, we are also proposing to include fine sand and sand, to draw the waste water into the layer.

Roxanne suggested to edit and only put in PE and remove the designer, to make it clear. Also, it's easier to use the numeral 1 (one) as we go through the written language to match the pictures.

Scott Johnson, hoping in the future, after a number of these are installed, that an engineer may not be needed. Scott suggested the following two changes:

Line 175: Figure 2 Liner left side of media layer 1 the wording cut off.

Line 211: Figure 3 lower right bottom note, add Media Layer 2.

There were additional questions/discussions regarding language. Those questions were answered and resulted in no changes.

Joe Sullivan made a change to his motion to discuss to be for approval and was seconded by Ken Odom. The revised motion is to adopt Roxanne Groover's suggestion about listing the PE only (removing "designer") throughout section, replace the words one and two with numbers (like in the diagram) instead of writing it out throughout the section, change font on figure 2 and 3 to all fit in the text boxes, and Denworth Cameron's to allow a gravity option instead of just low pressure.

MOTION PASSED unanimously with edits, 8 ayes. Motion Carried and issue approved with edits.

Issue 19-02 Update ASTM International Standard Reference

Ed Barranco introduced Issue 19-02 for ASTM referenced standards in rule section 64E-6.014(2)(a), of the Florida Administrative Code (FAC). Some standards have been withdrawn and replaced, very similar a technical change.

MOTION to approved 19-02 as submitted by Scott Johnson and seconded by Robert Washam approve Issue 19-02 approved.

PASSED Unanimously 8 ayes. Motion carried and issue approved as submitted.

Issue 19-03 Repair Site Plan Standards

Ed Barranco introduced Issue 19-03 related to site plan drawings to scale standards in rule section 64E-6.015 and 64E-6.004(3)(a), (b) of the Florida Administrative Code (FAC). Requires site plans to be drawn to scale for repairs and requires standard engineering scales for all plans.

MOTION to discuss Issue 19-03 by Ken Odom and seconded by Bob Washam.

Line 32 and 33, what does that mean.

David Hammonds indicated, if someone was using an AutoCAD program, this was a note to clarify. Wanted to make sure we didn't exclude it and need to put some kind of notation for percent error when the Department receives these items. When they are printed they are not to scale.

Bob Washam confirms this AutoCAD language will not be included in the rule.

Scott Johnson, do not refer to it as AutoCAD. Suggest referring to it as computer aided design, based on a survey and require it to be to the level of accuracy of the survey. The details of the survey are usually to two decimal places (sometimes one), nobody should do more detail than the survey.

Line 26 standard engineering scales strike 1:10 that is metric. Use one inch is 10, 20, or 30 feet. That is his impression of engineered drawing scales. Architectural scales would be ½, 3/8, or ¼.

Ken Odom, lines 9 and 10 repairs were a surface water body boundary for the repair. If the boundary is within the set back and it requires an additional 25 feet.

David Hammonds responded, when you look at table 5, it indicates various setbacks for different surface water bodies. In situations where the surface water is very minimal, we wanted that minimum set back of 25 feet plus an additional 25 feet, by indicating there are different setbacks for different water bodies. This is adding an additional 25 feet top cover the setback to the water body. Some of the old systems don't even have 25 feet. This is codifying our current interpretation.

Line 50 (g) potable and non-potable water lines and valves to be shown on a site plan. Irrigation lines are

You could show valves, but it is next to impossible to show all water lines. Potable water lines from a well or city water supply would be much easier to show.

- Line 52, would require you to perform soil evaluations all over the property for those which are filled or excavated.
- Line 79 and 80, floor plan for split systems a plumbing diagram is required to scale. In Santa Rosa county which requires a laundry system. I don't know about a plumbing diagram with a floor plan, you could show where it exits the slab, but you couldn't show where is goes throughout the slab. Don't agree with to scale drawing on a repair.
- Roxanne Groover comments, what drove this requirement for repairs being drawn to scale? Maybe a phased in approach. Doesn't think the Health Departments can handle the additional work. Contractors are freaking out about finding someone to draw this to scale and the home owners are going to have to pay for it.
- Ed Barranco, many things are driving this proposal not just variances. Water lines and wells being found not to be meeting setbacks. Suggest to table it and let us come back to the issue.
- Denworth share concern for situations with active nuisance situations may have to deal with them uncorrected longer and getting the plan drawn to scale may delay the repair work.

MOTION to table the issue by Scott Johnson and seconded by Roy Pence.

MOTION PASSED Unanimously 8 ayes. Motion carried and issue tabled.

Land application of sewage, lime stabilization facilities, and storage Issue 19-05

Ed Barranco introduced Issue 19-05 for rule section 64E-6.010, FAC. The authority for the Department to permit land application of sewage operations was removed in 2016. The prosed language is to reflect our authority and makes clarification to the remaining language as it relates to lime stabilization facilities and storage tanks.

Motion to approve issue 19-05 by Scott Johnson and seconded by Joe Sullivan.

PASSED Unanimously 8 ayes. Motion carried and issue approved as written.

Change in permit conditions requiring a permit amendment Issue 19-06

Ed Barranco introduced Issue 19-06 for rule section 64E-6.010, FAC. Deals with holding tanks, storage tanks, and lime stabilization. Since land application went away, the Department is inspecting the lime stabilization and holding tank facilities operated by the haulers. We are requiring the septage hauler to amend their haulers permit, if they are doing storage and stabilization activities. This way, we can add them to their operating service permit.

Motion to approve issue 19-06 by Will Bryant and seconded by Scott Johnson.

PASSED Unanimously 8 ayes. Motion carried and issue approved as written.

Issue 19-07 Fees

Ed Barranco introduced Issue 19-07 for rule section 64E-6.030, FAC. We have taken the septic disposal site evaluation fee and reducing it by half (\$200 to \$100). Amending the language to address inspection for stabilization and holding tanks for new or removed tanks. Fee intended to cover amendment of records and site visits at these facilities.

MOTION to discuss made by Ken Odom and seconded by Joe Sullivan.

Ken asked if the fee was for tank or if a \$100 fee. David Hammonds indicated the intent is per tank. Ken confirmed that 10 tanks would be \$1,000 fee. Ed Barranco indicated it is to cover our time and expense to perform the inspection. Will asked if the fee was a one-time fee. Ed Barranco confirmed it is a onetime fee for installation or removal.

Scott Johnson: Line 3(t) stabilization is misspelled.

Andrea Samson voiced concern that all costs are increasing and is very concerned. For standard 245 tanks systems require more pumping than conventional tanks and it will cost the homeowner a lot more with this fee.

Roxanne Groover recognized to reply to Andrea Samson, indicates ATU systems require less pumping than the conventional system (3-5 years) and provided information as to the reason for that difference. Provided people are not flushing kitty litter and flushing wipes and do what they are supposed to with the system.

Other general discussions occurred, but did not change the language.

MOTION to approve issue as submitted19-07 by Will Bryant and seconded by Scott Johnson.

PASSED Unanimously 8 ayes. Motion carried and issue approved as submitted.

Status of Old TRAP Approved Issues

Ken Odom inquired as to where the Department was with issues previously approved by the TRAP. Ed Barranco indicated there are 19 or so issues that have been approved. These are up on our website. Our intensions are to move those forward after we complete the current rule making, and reminded the panel we are on a 100-day deadline. We will get those off the back burner and move them forward.

Ken Odom shared his ongoing concerns with drain lines within 10 feet of the length of each other. A mound system with a restricted area. System had to have several drain lines connected at the ends, looped three lines around to make them within 10 feet of the length of each other, and end them at the header pipe. It still says in the code "As near practical as possible." Ken would like to see this addressed in code rather than in an interpretation. Go to a percentage or squarefeet of the other line(s). Unnecessary to make them within 10 feet of each other. Most contractors are going to do the right thing.

Ed Barranco indicated we will look more into it.

Legislative updates

Ed Barranco indicated None of the bills have been scheduled to be heard yet.

HB 63 (Property-Assessed Clean Environment); SB 282 (identical)

The bills allow local governments to provide assistance to those property owners who voluntarily make a water quality improvement to their property by installing an advanced septic nitrogen-reducing technology or by connecting to central sewerage systems.

The proposed bills language adds the term "water quality" to the list of qualifying improvements

for a property. Impact could be the homeowner can choose to install an advanced septic nitrogen-reducing technology system.

HB 85 (Onsite Sewage Treatment and Disposal Systems); SB 214 (identical)

These bills will impact over 2.0 million OSTDS in existence in Florida, with over 352,000 systems located in the springshed protection areas identified by the Department of Environmental Protection.

The bills amend section 381.0065, Florida Statutes (FS) – Onsite Sewage Treatment and Disposal Systems (OSTDS) Regulation, by creating a new subsection that introduces a five-year periodic inspection program to be implemented over a ten-year period. The bill further requires DOH to create a database or inventory of all OSTDS in the state. Establishes a disclosure requirement for OSTDS at the time of sale of the property. Conflicts with somewhat with 381.00651, which is the current periodical evaluation inspection law. We have written an analysis.

HB 141 (Water Quality Improvements); SB 216 (Water Quality Improvements); SB 368 (Land Acquisition Trust Fund) (similar)

These bills are related to water quality improvements, establishing criteria to enable additional protections for the Indian River Lagoon Basin. The bill requires the Florida Department of Environmental Protection to fund projects in the Indian River Lagoon Basin and to submit an annual report to the Governor and Legislature. Increases opportunities for Onsite Sewage Treatment and Disposal Systems (OSTDS) located in the Indian River Lagoon comprehensive

conservation and management plan areas to be connected to sewer systems. Provides funding for the Indian River Lagoon comprehensive conservation and management plan projects, which include upgrades and expansions to existing wastewater treatment facilities, to bring service connections to homes and business that are not connected to sewer.

As this bill relates to the Department of Health (DOH), DOH may be handling the associated septic tank abandonments. One abandonment method requires a permit from DOH and the second method is completed through the local utility or plumbing authority; the second method does not require DOH permitting or inspection.

Depending on the septic tank abandonment method used, DOH abandonment permitting could potentially increase.

HB 973; SB 1022 (Onsite Sewage Treatment and Disposal Systems) (similar)

The bills propose transfer of the onsite sewage treatment and disposal system (OSTDS) functions from the Department of Health (DOH) and DOH's 67 County Health Departments (CHD) to the Department of Environmental Protection (DEP) by a type two transfer. The effective date is July 1, 2019.

Propose to remove the requirement for research projects to be initially approved by the Technical Review and Advisory Panel (TRAP). In addition to removing the prohibition of awarding research projects to persons who serve on the TRAP or the Research Review and Advisory Committee (RRAC).

Propose to eliminate one of the statutory committees called the RRAC, who's role is to advise DOH on directions of new research, review and rank proposals for research contracts, and review and comment on draft research reports.

Propose the establishment of an OSTDS Technical Advisory Committee (TAC) to assist DEP in developing rules to increase availability and cost-effectiveness, and provide low maintenance and reliability of nutrient-removing OSTDS in the marketplace.

Following other bills that could be amended to impact DOH EH.

- HB 405, Grall (St. Johns River Upper Basin Watershed Pollutant Control Program) Agricultural Use Plans. No longer regulated by DOH.
- HB 497, Webb and Good (Sanitary Sewer Laterals) Proposes notification requirements of homeowners of leaky sanitary sewer laterals.
- CS/HB 397, Plakon, Smith (Professional Regulation) Prohibits a contractor being denied a license based on their past criminal history.
- SB 628, Albritton and HB 1199, Jacobs (Water Resources) The Department may need to report statewide data about OSTDS numbers and locations to the Office of Economic and Demographic Research, but that is public information any way.

5. OTHER ITEMS OF INTEREST TO THE TRAP

Motion to have the DOH to email requests for nominations for Chair and Vice Chair by Joe Sullivan and seconded by Roy Pence.

MOTION PASSED Unanimously 8 ayes. Motion carried and approved.

6. PUBLIC COMMENT

None.

MEMBERS OF THE PUBLIC WERE FREE TO SPEAK DURING THE MEETING AND DID SO. THERE WAS NO ADDITIONAL PUBLIC COMMENT.

Joe Sullivan made a MOTION to Adjourn, seconded by Ken Odom PASSED Unanimously. Meeting Adjourned at 12:10 p.m.

The following issues will be discussed first, as a priority, at the 2/28/19 TRAP Meeting: 19-04, 19-01, and 19-02.

After these issues have been discussed, then the remaining issues will continue in sequential order: 19-03, 19-05, 19-06, and 19-07.

19-01 ISSUE FOR TECHNICAL REVIEW AND ADVISORY PANEL CONSIDERATION

Printed 2/26/2019 9:55:27 AM

Next Trap Meeting: 2/28/2019

Cubicate Nitr

Subject: Nitrogen-Reducing Media Lined Drainfields Rule Sections: 64E.009				
<u>lssue:</u>	The Passive Nitrogen Study provided at least one system that is simple enough and reliable enough to allow incorporation into the prescriptive portion of the rule. While DOH has adopted a liner less option, there should be other options with liners meeting the rule requirements, included in the rule regardless of cost. Therefore, the Department should include systems with liners.			
Issue Originated By:	DO/DEP			
Purpose and Effect	The proposed changes Allow owners to opt to install engineer-designed nitrogen-reducing media layers under the conventional drainfield and provides the prescriptive requirements for such an installation with or without liners.			
Proposed Rule Change:	19-0164E-6.009(7) INRB language 2-22-19.docx (See Attached)			
Summary:	Provides for an engineer-designed nitrogen-reducing liner beneath a conventional drainfield.			
Possible Financial Impacts:	The installation of the media will be an expense in addition to the conventional system. If embraced by the BMAP or mitigation requirements, this is a nother low cost alternative to other performance-based nitrogen-reduction systems and requires no operating permit or maintenance contract.			
Date New:	12/6/2018			
Initially Reviewed by Trap:				
Tabled by Trap:				
Trap Review Finished:				
Variance Committee Reviewed:				
Trap Review Variance Comments: Trap Final Decision:				
Final Outcome:				
Comments: See also TRAP Is	sue #15-02			
Ready for Rule				
In Rule				
Rule Date:				

TRAP 19-01

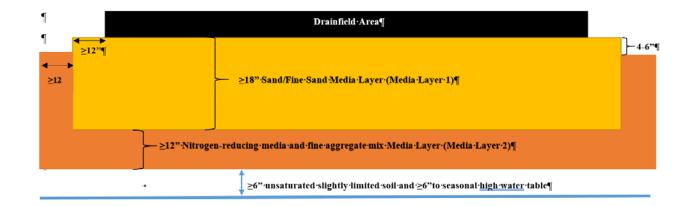
64E-6.009(7) In-ground Nitrogen-reducing Biofilters (INRB)

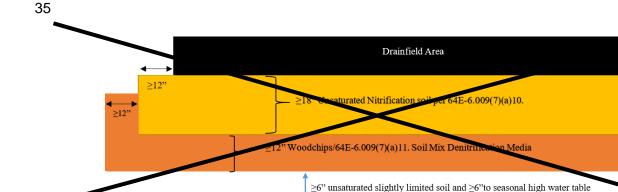
64E-6.009(7) In-ground Nitrogen-reducing Biofilters (INRB) – An arrangement of certain types of materials installed in layers underneath a drainfield for the purpose of reducing the mean total nitrogen by acting as a biological filter. INRB Nitrogen-reducing media layers, also referred to as media layers, may be placed beneath the drainfield provided the resulting system meets all requirements of this chapter except as noted in this subsection. The removal efficiency for mean total nitrogen (TN) is expected to be a minimum of 65% for all INRB. Where a liner is used as part of the drainfield design, it shall be installed per paragraph (b) or (c) below. Where paragraph (b) or (c) does not modify a standard found in paragraph (a), the standard found in paragraph (a) shall apply. All repairs or modifications to existing INRB systems shall be required to meet the standards of this subsection.

- (a) INRB Nitrogen-reducing media layers shall be installed as follows:
- 1. This layer described in this subparagraph shall also be referred to as media layer one.

 The drainfield shall be installed <u>centered</u> over sand fill material that is at least 18 inches thick and conforms to the textures and colors in subparagraph 10. below. Media layer one 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 one the sand fill material layer required in subparagraph 1. above there shall be a nitrogen-reducing media and fine aggregate mix media layer, also referred to as media layer two, 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 and any other effluent release point. The Mmedia layer two shall also extend upward along the boundary of media layer one the sand fill material to a point four to six inches below the bottom of the drainfield. Media layer one The drainfield shall be centered above the media layer two. The Mmedia layer two 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 media layer.
 - 3. The bottom of the media layer two shall be at least 6 inches above the wet season water table.





- Figure 1. INRB media layer system
- 4. While media longevity and nutrient reduction may be enhanced by the use of lowpressure distribution, any Department-approved drainfield effluent distribution method may be used.
 - 5. The natural and existing soil profile throughout the area of the drainfield shall indicate slightly limited soils extending from the ground surface to at least 66 inches below grade the bottom of the nitrogen-reducing media layer.
 - 6. Only drainfield materials approved per Rule 64E-6.014 or Rule 64E-6.009, F.A.C. shall be

45 used.

- 7. As measured vertically, no portion of the media layer two required in subparagraph 2.

 47 above, shall be within 18 inches of the 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. Lumber that is used as a source of lignocellulosic material must be untreated. The acceptable range of sizes of the individual types of nitrogen-reducing material shall be what is recognized by the industry that produces the materials, and must be routinely available for public purchase. Lignocellulosic material must be free of extraneous non-woody material, for example; plastic, metal, grass, leaves, and any other debris. The nitrogen-reducing media shall be demonstrated in Florida-based studies to be effective at providing a substrate for denitrification.
 - 9. The nitrogen-reducing media shall comply with the provisions of Rule 64E-6.0151, F.A.C.
 - 10. The soil layer between the infiltrative surface of the drainfield and the Mmedia layer one 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 any other effluent release point 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; orb. those with colors on the gley charts.
 - 11. The Mmedia layer two 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 media layer. The fine aggregate to be mixed with the nitrogen-reducing media 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

- 71 fine sand, and loamy very fine sand; and shall conform to the colors in subparagraph 10. above.
- 72 The Mmedia layer two shall be thoroughly mixed while the soil is in a non-plastic state, with the
- 73 constituents uniformly distributed when installed.

- 12. Where the system has a total required drainfield size over 1500 square feet, the design engineer shall address the potential for mounding of the effluent between the drainfield and the bottom of the media layer two at the estimated sewage flow and will increase the separation between the drainfield and the media layer two required in subparagraph 2. above, to ensure media layer one maintains no less than 18 inches of unsaturated soil beneath the drainfield. A four-inch diameter observation port in the center of the drainfield shall be installed to monitor this parameter. The observation port shall be capped and lockable and installed within a protective surface cover. A toilet flange 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, 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 shall be grouted to prevent effluent from flowing down the outer surface of the port to the media.
- 13. Drainfield repair shall not necessitate media <u>layer two</u> 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 efficiency which shall be a minimum 65%.
- 14. Setback distances to <u>media layers one and two</u> the denitrification media or soil material directly above denitrification media extending to the infiltrative surface of the drainfield shall be reduced by the following:
- a. Except for building foundations, vertical obstructions and pilings for elevated structures,
 where the required setback is ≤5 feet, the setback shall be reduced to one foot.
 - b. Where the required setback is ≥10 feet, the setback shall be reduced by five feet.

97 c. Setbacks to all other parts of the system shall be in compliance with the requirements in 98 this Chapter and section 381.0065, Florida Statutes. 99 (b) INRB layers with Liner, no underdrain, shall be installed as in paragraph (a) above with 100 the following variations: 101 1. The system drainfield shall be low-pressure dosed unless the designer chooses another 102 method demonstrated to provide adequate nitrification. Lift-dosing may be used provided the 103 design calculations to show that the entire distribution network will be charged with each dose. 104 Only approved drainfield materials per 64E-6.014 or 64E-6.009, F.A.C. shall be used. 105 2. The natural and existing soil profile throughout the area of the drainfield must indicate 106 slightly limited soils extending from the ground surface to at least 66 inches below grade. 107 3. Media layer two shall be enclosed beneath and on the lower 6-8 inches of all sides by an 108 impermeable liner composed of polyvinyl chloride (PVC), high-density polyethylene (HDPE), 109 ethylene propylene diene methylene (EPDM) or other material having a thickness of at least 30 110 mils and being certified by the manufacturer for a minimum lifetime of 30 years buried in contact 111 with sewage. 112 4. No portion of the liner or media layer two shall be within 18 inches of the infiltrative 113 surface of the drainfield. 114 5. The lowest point of the liner or media layer shall be no less than 6 inches above the water 115 table at the wettest season of the year. There shall be at least 6 inches of unsaturated slightly 116 limited soil between the bottom of the liner and the seasonal high water table. 117 6. Media layers one and two shall extend beneath the entire drainfield absorption surface to 118 a point at least 3.5 feet beyond the perimeter of any portion of the drainfield absorption surface 119 and any other effluent release point. For repairs, the 3.5 feet dimension may be reduced 120 incrementally to not less than 1.0 feet if necessary to comply with a setback or if physical room 121 is unavailable. Maintaining the 3.5 feet dimension shall have a protection factor of 5 in

determining the relative priority of competing factors in the application of rule 64E-6.015 Table

123 V. No part of the liner shall be placed within 18 inches of the pump or treatment tank. 124 7. Media layer one shall comply with sub-subparagraph a.10. above. 125 8. Media layer two shall comply with sub-subparagraph a.11. above. 126 9. The department shall not require sampling although sampling may be required by the 127 designer, municipality or other state agency as necessary to comply with applicable regulatory 128 requirements. 129 10. Where the system has a total required drainfield size over 1500 square feet, the design 130 engineer shall address the potential for mounding of the effluent between the drainfield and the 131 liner at the estimated sewage flow and will increase the separation between the drainfield and 132 media layer two to ensure media layer one maintains no less than 18 inches of unsaturated soil 133 beneath the drainfield. A four-inch diameter observation port shall be installed in the center of 134 the liner to allow the liquid level of effluent contained within the bottom of the media liner to be 135 monitored. The observation port shall be capped and lockable and installed within a protective 136 surface cover. A toilet flange shall be securely attached to the bottom of the observation port to 137 prevent the port from being inadvertently raised from its installed position. The observation port, 138 including the flange, shall be perforated at the lowest elevation possible to allow accurate 139 measurements. If installed within three feet of the sidewall of a bed or trench, the port shall be 140 grouted to prevent effluent from flowing down the outer surface of the port to the media. 141 11. The perimeter of the liner, in feet, multiplied by the perimeter loading rate shall not be 142 less than the estimated daily sewage flow for the system. The most restrictive soil texture

the liner shall be used to determine the media layer perimeter loading rate.

143

144

146

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

147				
148	Perimeter Loading Rate			
149	Soil Texture (gal/ft/day)			
150	Coarse sand not associated with a			
151	seasonal water table of less than 48			
152	inches; sand; and loamy coarse sand 5			
153	Fine sand 4			
154	Loamy sand; coarse sandy loam;			
155	and sandy loam 3			
156				
157	12. Prior to the department's construction inspection, the designer shall provi	ide an as-built		
158	cross section and plan view of the installed INRB system components.			
159	13. The designer may specify methods to replenish media and remove spen	13. The designer may specify methods to replenish media and remove spent media if the		
160	continued presence of such spent media appreciably reduces the efficacy of the process			
161	provided the methods do not compromise the efficacy of the system.			
162	14. Drainfield repair shall not necessitate media layer two replacement provi	ded the media		
163	has been in use for less than 10 years or if sampling within the previous 12 months shows			
164	denitrification at or above the target level for mean total nitrogen (TN) removal efficiency which			
165	shall be a minimum 65%.			
166	15. Any seams or penetrations through the liner shall be sealed in accordan	ce with the liner		
167	manufacturer's instructions to prevent leakage for the life of the liner.			
168	16. Setback distances to the liner, or media layers one and two extending to	the infiltrative		
169	surface of the drainfield shall be reduced by the following:			
170	a. Except for building foundations, vertical obstructions and pilings for elevations	ed structures,		
171	where the required setback is ≤5 feet, the setback shall be reduced to one foot.			
172	b. Where the required setback is ≥10 feet, the setback shall be reduced by f	ve feet.		

c. Setbacks to all other parts of the system shall be in compliance with the requirements in

174 this Chapter and

s. 381.0065, FS.

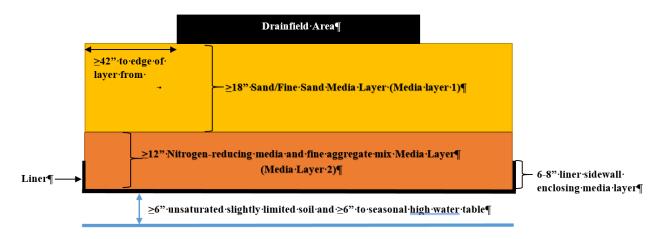


Figure 2 INRB with Liner without underdrain

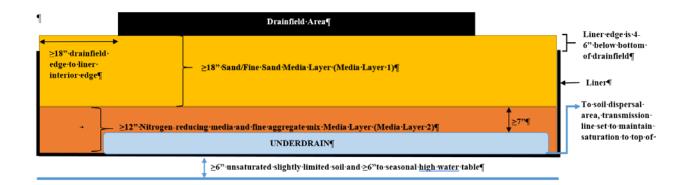
- (c) INRB layers with Liner with underdrain, shall be installed as in paragraph (a) above with the following variations:
- 1. The drainfield shall be installed and centered over media layer one which conforms to the textures and colors in subparagraph (a)10. Media layer one must extend at least 18 inches past the perimeter of the drainfield.
- 2. Below media layer one, media layer two shall be installed and must extend at least 18 inches past the perimeter of the drainfield. Media layer two shall conform with subparagraphs (a)8. and (a)11., above.
- 3. An impermeable liner meeting the construction standards of subparagraph (b)3., above, shall be installed below media layer two. 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 one and two, stopping at a point four to six inches below the level of the bottom of the drainfield. No portion of the media layer shall be less than 18 inches below the infiltrative surface of the drainfield. Media

layer two with liner shall extend beneath the entire drainfield absorption surface and extend at least 18 inches beyond the perimeter of any portion of the drainfield absorption surface and any other effluent release point. No part of the liner shall be placed within 18 inches of the pump or treatment tank.

4. An underdrain shall be installed on top of and in contact with the interior surface of the bottom of the liner within the media layer, and shall disperse to a separately sized, located and installed drainfield. The underdrain shall be designed to maximize effluent movement media layer two into the underdrain. The transmission line from the underdrain to the separate drainfield shall be set to maintain saturation to the top of the media layer. In order to maintain distribution as high as possible above the seasonal high water table and to maintain the most shallow depth to finished grade the transmission line must not have a slope exceeding 1/8 per foot when distributing the effluent to the separate drainfield.

5. Provided the effluent has passed vertically without pressure through at least 24 inches of unsaturated soil, the designer, if an engineer, may specify the collection of the effluent and distribution to an absorption drainfield that is separated from the seasonal high water table by no less than 6 inches and may be more than 30 inches below the ground surface, per the requirements of subparagraph 4.

6. The minimum thickness of media layer two as measured between the top of the underdrain and the top of the media shall be 7 inches.



213	Figure 3 – INRB with Liner with underdrain
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215	(b) Renumbered to (d) No changes.
216	(c) Renumbered to (e) No changes.
217	(d) Renumbered to (f) No changes.
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19-02 ISSUE FOR TECHNICAL REVIEW AND ADVISORY PANEL CONSIDERATION

Next Trap Meeting: 2/28/2019

Subject: Update ASTM International standard reference

Rule Sections: 64E-6.014(2)(a)

lssue:	ASTM has confirmed to DOH	I, the standard ASTM F 405

has been withdrawn and standard ASTM F 667 is now in effect for corrugated polyethylene pipe. The requirement in 64E-6.014(2)(a)4., FAC, will be updated with the next rule change. Other standards referenced in this section

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will be checked for updates as well.

Issue Originated By: Eb Roeder

<u>Purpose and Effect</u> The proposed changes Update ASTM International

standards for septic related materials

Proposed Rule Change: 19-02--64E-6.0140 Update ASTM standards.docx (See Attached)

Summary: Standard ASTM F 405 has been withdrawn and ASTM F

667 is now in effect for corrugated polyethylene pipe. The requirement in 64E-6.014(2)(a)4., FAC, will be updated with the next rule change. Meanwhile, please accept the ASTM F 667 pipe as meeting the rule requirement. Additionally, existing pipe marked with ASTM F 405 may likewise be used and approved while the stock remains. Any alternative products that were approved specifying the use of ASTM F 405 compliant materials may likewise be approved using ASTM F 667 compliant materials.

<u>Possible Financial Impacts:</u> None Date New: 1/8/2019

Initially Reviewed by Trap:

Tabled by Trap:

Trap Review Finished:

Variance Committee Reviewed:

Trap Review Variance Comments:

Trap Final Decision:

Final Outcome:

Comments:

Ready for Rule

Rule Date:

1 TRAP 19-02

2 64E-6.014 Construction Standards for Drainfield Systems

- 3 (1) No change.
- 4 (2) Header pipe header pipe, when used, shall be installed in compliance with the following
- 5 requirements:
- 6 (a) Header pipe shall meet one or more of the following requirements:
- 7 1. ASTM D-3034-1698, Standard Specification for Type PSM Poly-(Vinyl Chloride) (PVC) Sewer
- 8 Pipe and Fittings (1998), herein incorporated by reference.
- 9 2. ASTM D-2729-<u>17</u>96 Standard Specification for Poly-(Vinyl Chloride) (PVC) Sewer Pipe and
- 10 Fittings (1996), herein incorporated by reference.
- 3. AASHTO M252M-96 Standard Specification for Corrugated Polyethylene Drainage Pipe
- 12 (1996), herein incorporated by reference. Materials used to produce this pipe shall meet ASTM
- 13 D 3350-98a, Standard Specification for Polyethylene Plastics Pipe and Fittings Materials (1998),
- 14 Cell Classification 324420C, herein incorporated by reference.
- 4. ASTM <u>F667/F667M-16</u>, <u>Standard Specification for 3 through 24 in. Corrugated Polyethylene</u>
- 16 Pipe and Fittings F 405-97 Standard Specification for Corrugated Polyethylene (PE) Pipe and
- 17 Fittings (1997), herein incorporated by reference. Materials used to produce this pipe shall meet
- 18 ASTM D 3350-98a, Standard Specification for Polyethylene Plastics Pipe and Fittings Materials
- 19 (1998), Cell Classification 324420C or E, herein incorporated by reference.
- 5. ASTM F 810-1299(2018), Standard Specification for Smoothwall Polyethylene (PE) Pipe for
- 21 Use in Drainage and Waste Disposal Absorption Fields, herein incorporated by reference.
- 22 Materials used to produce this pipe shall meet ASTM D 3350-98a (1998), Standard

- 23 Specification for Polyethylene Plastics Pipe and Fittings Materials, Cell Classification 32442C or
- 24 E, herein incorporated by reference.
- 25 (3) and (4) No changes.
- 26 (5) Drain trenches and absorption beds drain trenches and absorption beds are the standard
- 27 subsurface drainfield systems used for disposing of effluent from septic tanks or other sewage
- waste receptacles. When used, these systems shall be constructed as specified below.
- 29 (a) and (b) No change.
- 30 (c) When installing a drainfield system that uses mineral aggregate, all portions of the header
- pipe and perforated drain pipe shall be installed in aggregate conforming to ASTM C33/C33M-
- 32 <u>18 C33-86</u> or lightweight aggregate conforming to ASTM <u>C330/C330M-17a</u> C330-87 meeting
- 33 State of Florida Department of Transportation (FDOT) specifications under Section 901,
- 34 "Standard Specifications for Road and Bridge Construction, <u>January 2019</u>1991" and the
- 35 following gradation requirements.
- 36 (d) through (f) No changes.
- 37 (g) The inside diameter of the drain pipe used in drainfields shall be determined based on the
- type and design of the proposed absorption system. However, for standard gravity aggregate
- drainfield systems, inside pipe diameter shall not be less than 4 inches. Perforated pipe shall
- 40 have two rows of holes, and a minimum perforated area of 1 1/2 square inches per linear foot.
- 41 Perforations shall be located not less than 30° or more than 60° from the vertical on either side
- 42 of the center line of the bottom of the pipe. However, for drainfield systems designed by an
- 43 engineer, drainpipe perforation area and hole configuration shall assure that effluent is
- distributed as equally as possible throughout the drainfield area. All plastic pipe shall conform to
- 45 the standards of ASTM D 3034-1698, Standard Specification for Type PSM Poly (Vinyl
- 46 Chloride) (PVC) Sewer Pipe and Fittings (20161998), herein incorporated by reference, ASTM

- 47 <u>F667/F667M-16</u>, <u>Standard Specification for 3 through 24 in. Corrugated Polyethylene Pipe and</u>
- 48 Fittings (2016) F 405-97Standard Specification for Corrugated Polyethylene (PE) Pipe and
- 49 Fittings (1997), herein incorporated by reference, or ASTM F 810-1299 (1999), herein
- 50 incorporated by reference.
- 51 (h) through (k) No changes.

19-03 ISSUE FOR TECHNICAL REVIEW AND ADVISORY PANEL CONSIDERATION

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Next Trap Meeting: 2/28/2019

In Rule Rule Date:

Subjec	t: Repair Site Plan Standards	
R	Rule Sections: 64E-6.015	
<u>Issue:</u>	The Department needs more detailed information on repair site plans to reflect actual details of drainfield, set backs (wells, water, etc) to ensure the repair meets all requirements in rule.	
Issue Originated By:	Ed Barranco	
Purpose and Effect	The proposed changes Clarify language to better specify what is required on the site plan.	
Proposed Rule Change:	19-0364E-015 Repair Site plans 2-22-19docx (See Attache	ed)
Summary:	Adds language to require site plans for repairs to be drawn to scale and allows for the current exception for drawing water bodies. Strikes previous language listing each individual items that shall be shown on the repair site plan, and referrs to the language for new system si plans.	
Possible Financial Impacts: Date New: Initially Reviewed by Trap: Tabled by Trap: Trap Review Finished: Variance Committee Reviewed: Trap Review Variance Comments: Trap Final Decision: Final Outcome: Comments:	None 1/9/2019	
Ready for Rule		

1 TRAP 19-03

2 64E-6.015 Permitting and Construction of Repairs.

- 3 All repairs made to a failing onsite sewage treatment and disposal system shall be made only
- 4 with prior knowledge and written approval from the DOH county health department having
- 5 jurisdiction over the system. Approval shall be granted only if all of the following conditions are
- 6 met:

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- 7 (1) No change
 - (a) A site plan in accordance with Rule 64E-6.004(3)(a), with the following exception for drawing surface water bodies. For repairs, where a surface water body boundary is within the setback required by the repair rule, plus an additional 25 feet, it must be shown on the site plan. showing property dimensions, the existing and proposed system configuration and location on the property, the building location, potable and non-potable water lines, within the existing and proposed drainfield repair area, the general slope of the property, property lines and easements, any obstructed areas, any private or public wells, or any surface water bodies and stormwater systems in proximity to the onsite sewage system which restricts replacement or relocation of the drainfield system. The existing drainfield type shall be described. For example, mineral aggregate, non-mineral aggregate, chambers, or other.
 - (b)-(f) No changes.

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- Rule issue for Site/floor Plans, see 64E-6.004(3)(a),(b)
- 22 64E-6.004(3) No change.
 - (a) A <u>legible</u> plan or plat of the lot or total site ownership. The site plan <u>must</u> shall be drawn

- to scale and must shall be for the property where the system is to be installed. Site plans must
- 25 <u>not be on paper smaller than 8.5 inches by 11 inches, nor larger than 24 inches by 36 inches.</u>
- Site plans must use the standard engineering drawing scales of 1:10; 1:20; 1:30; 1:40; 1:50 or
- 27 1:60. The site plan must be drawn to the largest scale possible to show the greatest amount of
- detail, based on the size of the paper and the property dimensions. Property dimensions must
- 29 <u>be rounded down to the whole number when drawn on the site plan. For example, a property</u>
- 30 <u>dimension of 155.97 feet or 155.10 feet would be rounded down to 155 feet when drawn on the</u>
- 31 <u>site plan. Where site plans are generated by an engineer, surveyor, etc. using a computer-aided</u>
- 32 <u>design system, the actual property dimensions can be used. AUTOCAD TO 2 DECIMAL</u>
- 33 PLACES///1 OR 2 PERCENT ERROR FOR PAPER SHRINKAGE, ETC.
- 1. The site plan <u>must</u> shall show boundaries with dimensions and any of the following
- features that exist or that are proposed. The closest distance from a system to any feature must
- 36 be indicated on the site plan. Features must be shown from the starting point to the ending
- point. For example, a driveway must have a beginning and ending point on the site plan,
- 38 regardless of the material from which it is constructed.÷
- 39 a. Structures;

- 40 b. Swimming pools;
- 41 c. Recorded easements;
- d. Onsite sewage treatment and disposal system components, where the area comprising
- 43 the drainfield may be represented as a figure for which the boundaries of that figure are the
- 44 actual boundaries of the drainfield. Where more than one drainfield is used, each must be
- 45 represented separately; for example, where a 2000 square foot drainfield is split into two-1000
- 46 square foot drainfields, two areas must be depicted;
 - e. Slope of the property as it relates to the system location and drainage affecting the

48 system, expressed in percent slope; f. Wells, identifying the type of well present; 49 50 g. Potable and non-potable water lines and valves; h. Drainage features and their direction of flow; 51 52 i. Filled or excavated areas on the property; 53 j. Soil profile locations Excavated areas for onsite sewage systems; k. Obstructed areas, which includes easements and any vegetation that will not be removed, 54 55 for example a large tree; I. Surface water body boundaries bodies; and 56 57 m. Location of the reference point for system elevation. 2. No change. 58 59 3. No change. 4. No change. 60 5. No change. 61 62 (b) For residences, a legible floor plan drawn to scale or showing the total building area of 63 the structure, at the applicants' option, and showing the number of bedrooms, identifying all 64 rooms within the structure as to type, and the building area of each dwelling unit. Where a single elevator or stairwell exists from one floor to another, the building area encumbered by either 65 66 would be included only from one floor, which must be the floor which will provide the largest 67 building area. Where more than one elevator or stairwell exists, each one shall be counted for 68 building area using the same method. Floor plans must not be on paper smaller than 8.5 inches by 11 inches, nor larger than 24 inches by 36 inches. Floor plans must be drawn using the 69

standard engineering scales or the standard architectural drawing scales of 3; 1 1/2; 1; 3/4; 1/2; 3/8; 1/4; 3/16; 1/8; 3/32. The floor plan must be drawn to the largest scale possible to show the greatest amount of detail, based on the size of the paper and the building dimensions. When identifying and measuring excluded areas from building area, any common wall of the excluded area and building area must be measured to the interior of the excluded area. Non-residential establishments must shall submit a legible floor plan drawn to scale showing the square footage of the establishment, all plumbing drains and fixture types, and any other features necessary to determine the composition and quantity of wastewater to be generated. Plumbing fixtures located at a non-residential establishment must shall be included on the floor plan, but need not be drawn to scale. For any floor plan, where building plumbing is split into multiple systems, a plumbing diagram must be included but need not be drawn to scale.

19-04 ISSUE FOR TECHNICAL REVIEW AND ADVISORY PANEL CONSIDERATION

Next Trap Meeting: 2/28/2019

Subject: BMAP Adoption Rule Sections: 64E-6.001(8)

<u>Issue:</u> The DEP had adopted individual onsite OSTDS

remediation plans and designated areas in which they

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apply, as part of the Florida Springs and Aquifer

Protection Act of s. 373.807(3), FS. The DOH needs to reference these areas in rule, to ensure system repairs consist of nitrogen reducing systems are installed in the

springs protection and primary focus areas.

<u>Issue Originated By:</u> DEP

<u>Purpose and Effect</u> The proposed changes The proposed changes will allow

for expanded repair options in for systems in DEP basin management action plans (BMAP) areas, which includer

several Outstanding Florida Springs.

Proposed Rule Change: 19-04--64E-6.001(8) BMAP Adoption language (See Attached)

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Summary: The DEP had adopted individual onsite OSTDS

remediation plans and designated areas in which they apply, as part of the Florida Springs and Aquifer Protection Act of s. 373.807(3), FS. The proposed

language adopts basin management action plans (BMAP)

for several Outstanding Florida Springs.

<u>Possible Financial Impacts:</u> Yes. Nitrogen reducing systems are more costly than

conventional septic systems to install. DEP currently has a grant program available to contractors installing nitrogen reducing systems for home owners, who are located in the springs protection and primary focus areas, needing to repair their failed septic system. Grants are available up to \$10,000, to offset the increased cost. It is

unknown how long the grants will be available.

Date New: 1/8/2019

Initially Reviewed by Trap:

Tabled by Trap:

Trap Review Finished:

Variance Committee Reviewed:

Trap Review Variance Comments:

Trap Final Decision:

Final Outcome:

Comments:

Ready for Rule	
In Rule	
Rule Date:	

1 TRAP 19-04

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- 3 (1) No change
- 4 (2) No change.
- 5 (3) No change.
- 6 (4) The Department of Environmental Protection, as required by the Florida Springs and
- 7 Aquifer Protection Act (Part VIII of Chapter 373, Florida Statutes), has adopted individual onsite
- 8 sewage treatment and disposal system remediation plans and areas to which they apply
- 9 pursuant to section 373.807(3), Florida Statutes, as part of basin management action plans
- 10 (BMAP) for several Outstanding Florida Springs, as defined by section 373.802(4), Florida
- 11 Statutes. In accordance with sections 373.807 and 373.811, installation of new conventional
- 12 <u>onsite sewage treatment and disposal system or repair of an existing conventional onsite</u>
- 13 sewage treatment and disposal system is prohibited within the BMAP boundaries of an
- 14 Outstanding Florida Spring, unless the BMAP remediation plan otherwise allows. Such systems
- cumulatively result in the significant degradation of water quality in Outstanding Florida Springs.
- 16 The following onsite sewage treatment and disposal system remediation plans are incorporated
- by reference and are available at https://www.flrules.org/Gateway/reference.asp?No=Ref-
- 18 XXXXX.
- 19 (a) Crystal River/Kings Bay Basin Management Action Plan, June 2018, Appendix D.
- 20 OSTDS Remediation Plan.
- 21 (b) DeLeon Spring Basin Management Action Plan, June 2018, Appendix D. OSTDS
- 22 Remediation Plan.
- 23 (c) Gemini Springs Basin Management Action Plan, June 2018, Appendix D. OSTDS
- 24 Remediation Plan.
- 25 (d) Homosassa and Chassahowitzka Springs Groups Basin Management Action Plan, June
- 26 <u>2018, Appendix D. OSTDS Remediation Plan.</u>

27	(e) Jackson Blue Spring and Merritts Mill Pond Basin Management Action Plan, June 2018,
28	Appendix D. OSTDS Remediation Plan.
29	(f) Upper Wakulla River and Wakulla Spring Basin Management Action Plan, June 2018,
30	Appendix D. OSTDS Remediation Plan.
31	(g) Wacissa River and Wacissa Spring Group Basin Management Action Plan, June 2018,
32	Appendix D. OSTDS Remediation Plan.
33	(h) Weeki Wachee Basin Management Action Plan, June 2018, Appendix D. OSTDS
34	Remediation Plan.
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36	(4) renumbered to (5) No change.
37	(5) renumbered to (6) No change.
38	(6) renumbered to (7) No change.
39	(7) renumbered to (8) No change.
40	Rulemaking Authority 381.0065(3)(a), 489.553(3), 489.557(1) FS. Law Implemented 381.0065,
41	381.0067, <u>373.811(2)</u> , 386.041, 489.553 FS. History–New 12-22-82, Amended 2-5-85, Formerly
42	10D-6.41, Amended 3-17-92, 1-3-95, 5-14-96, 2-13-97, Formerly 10D-6.041, Amended 11-19-
43	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 <u>, MM-DD-YY</u> .
4.4	
44 45	Rulemaking Authority 381,0065(3)(a), FS, Law Implemented 373,811(2), 381,0065, FS, History–New

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Next Trap Meeting: 2/28/2019

Subject: Land application of sewage, lime stabolization facilities and storage Rule Sections: 64E-6.010

<u>Issue:</u>	The Department of Health authority to permit land application of sewage operations was removed two yeago. The rule proposal is making the related changes rule 64E-6.010, FAC, to reflect the Departments curre authority.	s to
Issue Originated By:	DOH	
Purpose and Effect	The proposed changes Removes language related to land application of sewage. Clarifies remaining language and permitting requirements for lime stabilization and storage of untreated sewage.	
Proposed Rule Change:	19-0564E-6.010 Land application lime stabolization (See Attacand storage.docx	hed)
Summary:	Strikes language related to permitting of land applicate of sewage. Provides additional clarification for lime stabilization operations and storage of sewage, until i properly disposed of at a site approved by the Department of Environmental Protection (DEP).	
Possible Financial Impacts: Date New: Initially Reviewed by Trap: Tabled by Trap: Trap Review Finished: Variance Committee Reviewed: Trap Review Variance Comments: Trap Final Decision: Final Outcome: Comments: Ready for Rule	None.	
Ready for Rule In Rule		
Rule Date:		

1 TRAP 19-05

64E-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 shall be cleaned or have its contents removed until the service person has obtained an annual written permit (Form DH 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 shall be made to the DOH county health department on Form DH 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. Any change to the permit conditions shall require a permit amendment. Permit amendments shall 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 1500 gallons, pumps, off truck stabilization tanks and pH testing equipment where lime stabilization and land application are is 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 shall be constructed, sized, and operated in accordance with the following provisions:

- 1. through 3. No change.
- 26 (b) and (c) No change.

- 27 (3) through (6) No change.
 - (7) The food establishment sludge and contents from onsite waste disposal systems shall be disposed of at a site approved by the <u>Florida Department of Environmental Protection DOH</u> county health department and by an approved disposal method. Untreated domestic septage or food establishment sludges 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 shall be permitted at locations within the jurisdiction of the Florida Department of Environmental Protection provided such septage and sludges have been properly treated by an approved septage-stabilization process, including lime stabilization, and an application using Form DH 4012 has been completed as part of the permitting process. For lime stabilization, pPrior 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.
- 77 (b) No land application of stabilized septage or food service sludge may occur until:
- 78 1. The site has been inspected and approved by department personnel.
- 79 2. The site evaluation fee has been submitted.

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- 3. An Agricultural Use Plan, Form DH 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.
 - (b)(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 64E-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 64E-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 64E-6.010(7)(I), F.A.C.
- 99 (e) renumbered to (c) No change.

- (f) Renumbered to (d) No change.
- (g) Renumbered to (e) No change. 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 (f) No change. Septage which contains toxic or hazardous waste must be disposed of in accordance with the rules of the Department of Environmental Protection.
- (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.

- (I) 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.
- (e) 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:0.0076 if the crop demand is calculated for P2O5.

AAR=P: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

166	Crop Phosphorous Demand in pounds per acre per 365 day period calculated for the crop or
167	vegetation grown on the land. Application methods shall be conducted in a manner which will
168	disperse the treated septage uniformly over the land application site.
169	(r) Permanent records of actual application areas and application rates shall be kept. These
170	records shall be maintained by the site owner, lessee, or the land applicator for a period of five
171	years, and shall be available for inspection upon request by the department or by DEP. An
172	annual summary of the total septage or sludge applied shall be provided with the annual update
173	to the Agricultural Use Plan. Records shall be kept and shall include:
174	1. Location of the septage treatment facility from which each load of treated septage is
175	obtained.
176	2. Date and time the treated septage was obtained from the treatment facility.
177	3. Dates of septage or sludge land application.
178	4. Weather conditions when applied.
179	5. Location of septage or sludge application site.
180	6. Amounts of septage or sludge applied.
181	7. Specific area of the site where septage or sludge was applied.
182	8. pH of stabilized septage or sludge being applied.
183	9. Soil groundwater table when septage was applied.
184	10. Vegetational status of application area.
185	(s) Renumbered to (g) No change.
186	(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) Renumbered to (h) No change.

- (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 septage storage tanks may be located at regional stabilization facilities, or at sites owned or leased by the disposal 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 current service permit application using form DH 4012 and provide all current information to the department prior to any changes being made. All changes shall be noted on an amended permit, and shall 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.
- 203 (9) and (10) No changes.

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, MM-DD-YY.

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Next Trap Meeting: 2/28/2019

Rule Date:

Subject: Change in permit conditions requiring a permit amendment Rule Sections: 64E-6.010

Rule Sections: 64E-6.010							
<u>Issue:</u>	Clarifying what is required when making a change to an existing permit, thus requiring the Department to review the changes and make an amendment to the existing permit.						
Issue Originated By:	DOH						
Purpose and Effect	The proposed changes The proposed changes detail what a permit amendment is and when it is required, as it relates to permits for holding tanks and lime stabilization activities for portable restrooms, portable hand washing facilities, restroom trailers, shower trailers and portable o stationary holding tanks containing domestic wastewater.						
Proposed Rule Change:	19-0664E-6.0101 Portable restrooms - holding tanks.docx (See Attached						
Summary: The proposed changes detail what a permit amen is and when it is required, as it relates to permits the holding tanks and lime stabilization activities for prestrooms, portable hand washing facilities, restrotrailers, shower trailers and portable or stationary tanks containing domestic wastewater.							
Possible Financial Impacts: Date New: Initially Reviewed by Trap: Tabled by Trap: Trap Review Finished: Variance Committee Reviewed: Trap Review Variance Comments: Trap Final Decision: Final Outcome: Comments:	none.						
Ready for Rule In Rule							
III I\uic							

1 TRAP 19-06

64E-6.0101 Portable Restrooms and Portable or Stationary Holding Tanks.

- (1) Persons servicing portable restrooms, portable hand washing facilities and portable or stationary holding tanks shall obtain an annual permit on Form DH 4013 from the county health department in the county in which the service company has an office or storage yard. The service company need not be permitted in neighboring counties in which the service company operates but does not have an office or storage yard. Service persons shall carry proof of possession of a current annual operating permit and vehicle inspection for review by department personnel in neighboring counties. Permits issued under this rule authorize the disposal service to handle liquid waste associated with portable restrooms, portable hand washing facilities, restroom trailers, shower trailers and portable or stationary holding tanks containing domestic wastewater produced in the State of Florida.
- (2) Application for a service permit shall be made to the DOH county health department on Form DH 4012, "Application for Septage Disposal Service Permit, Temporary System Service Permit, Septage Treatment and Disposal Facility, Septic Tank Manufacturing Approval". Any change to the permit conditions shall require a permit amendment. 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 64E-6.010(2)(a). 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 DH 4012 and provide all current information to the department prior to any changes being made. All changes shall be

- 26 <u>noted on an amended permit, and shall not alter the issue date of the permit. All alterations</u>
- 27 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:
- 29 (a) Evidence that the applicant possesses adequate equipment such as a tank truck,
- 30 pumps, off truck stabilization tanks and pH testing equipment where lime stabilization is and
- 31 land application are proposed, as well as other appurtenances and tools necessary to perform
- 32 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 shall be constructed,
- sized, and operated in accordance with the provisions of subparagraphs 64E-6.010(2)(a)1.-3.,
- 36 F.A.C.
- 37 (b) and (c) No change.
- 38 (3) through (6) No change.
- 39 (7) Portable Restrooms, Portable Holding Tanks, Stationary Holding Tanks, Mobile
- 40 Restroom Trailers, Mobile Shower Trailers, and Portable Sinks.
- 41 (a) through (t) No Change.
- 42 (u) Portable or stationary holding tank, portable restroom, and portable hand sink wastes
- 43 shall be disposed of into a septage treatment and disposal facility approved by the department
- 44 or into a treatment facility approved or permitted for such disposal by the Department of
- 45 Environmental Protection. These wastes shall be disposed of at land applied under provisions of
- 46 subsection 64E-6.010(7), F.A.C., provided a DEP-approved treatment facility or DEP approved
- 47 land application site. is not available. Companies which service portable or stationary holding
- 48 tanks or portable restrooms which use quaternary ammonium sanitizing and deodorizing
- 49 compounds are prohibited from having the wastes treated or disposed of at lime stabilization

- 50 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 64E-6.010(7)(a)-(h)(u), F.A.C.
- 56 (w) and (x) No Change
- 57 (8) No change.
- 58 Rulemaking Authority 381.0065(3)(a), 489.553(3) FS. Law Implemented 381.0065, 386.041 FS.
- 59 History-New 5-24-04, Amended 11-26-06, 6-25-09, 4-28-10, MM-DD-YY.

19-07 ISSUE FOR TECHNICAL REVIEW AND ADVISORY PANEL CONSIDERATION

Next Trap Meeting: 2/28/2019

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Troke Trap Wooding. 2/20/2010								
	Subject: Fees							
Rule Sections: 64E-6.030								
<u>lssue:</u>	Landspreading has been removed from the jursdictional authority. Therefore the fee is to the remnaining operations for lime stable septage storage, prior to disposal and for amendments.	s only applicable polization and						
Issue Originated By:	Ed Barranco							
Purpose and Effect	The proposed changes deletes the land application language associated with the fee, clarifies it is only for permitting of lime stabilization and septage storage and reduces the fee, as the land stabilization is no longer included.							
Proposed Rule Change:	19-0764E-030 Fee Draft.docx	(See Attached)						
Summary:	The language deletes the land application language associated with the fee, clarifies it is only for permitting of lime stabilization and septage storage and reduces the fee, as the land stabilization is no longer included.							
Possible Financial Impacts: Date New: Initially Reviewed by Trap: Tabled by Trap: Trap Review Finished: Variance Committee Reviewed: Trap Review Variance Comments: Trap Final Decision: Final Outcome: Comments:	Yes. Fee reduction for reduced regulation	1.						
Ready for Rule								
In Rule								

Rule Date:

1 TRAP 19-07

64E-6.030 Fees.

2

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

(a) Application and plan review for construction permit for new system.	\$100.00
(b) Application and approval for existing system, if system inspection is not required.	\$35.00
(c) Application and Existing System Evaluation.	\$50.00
(d) Application for permitting of a new performance-based treatment system.	\$125.00
(e) Site evaluation.	\$115.00
(f) Site re-evaluation.	\$50.00
(g) Permit or permit amendment for new system, modification or repair to system.	\$55.00
(h) Research/Training surcharge, new and repair permits.	\$5.00
(i) Initial system inspection.	\$75.00
(j) System reinspection (stabilization, non-compliance or other inspection after the initial	\$50.00
inspection).	
(k) Application for system abandonment permit, includes permit issuance and inspection.	\$50.00
(I) Annual operating permit industrial/manufacturing zoning or commercial sewage waste.	\$150.00
(m) Biennial operating permit for aerobic treatment unit or performance-based treatment system.	\$100.00
(n) Amendment to operating permit.	\$50.00
(o) Tank Manufacturer's Inspection per annum.	\$100.00
(p) Septage Disposal Service permit per annum.	\$75.00
(q) Portable or Temporary Toilet Service permit per annum.	\$75.00
(r) Additional charge per pumpout vehicle, septage disposal service or portable toilet service.	\$35.00
(s) Septage stabilization facility inspection fee per annum per facility.	\$150.00
(t) Septage stabililzation/holding tank inspection disposal site evaluation fee for additional	\$ <u>100.00</u> 200.00
tanks not already permitted or being removed-per tank.	
(tu) Aerobic treatment unit maintenance entity permit per annum.	\$25.00
(<u>u</u> v) Variance Application for a single family residence per each lot or building site.	\$200.00
$(\underline{v}\underline{w})$ Variance Application for a multi-family or commercial building per each building site.	\$300.00

(wx) Application for innovative product approval.

\$2,500.00

- 4 (2) The following fees are required to accompany applications for registration of individuals for septic tank contractor
- 5 or master septic tank contractor or for a certificate of authorization for partnerships and corporations.

(0)	Application	for	rogictration	including	examination.
ıα	I Application	TOT	redistration	inciuaina	examination.

\$75.00

(b) Initial registration.

\$100.00

(c) Renewal of registration.

\$100.00

(d) Certificate of authorization each two-year period.

\$250.00

- 6 Rulemaking Authority 154.06(1), 381.0066, 489.557(1) FS. Law Implemented 381.0065, 381.0066, 489.557 FS. History-
- 7 New 2-3-98, Amended 3-22-00, 4-21-02, 5-24-04, 11-26-06, 9-24-07, ##/##/2019.