

T E C H N I C A L R E V I E W A N D A D V I S O R Y P A N E L
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: Tuesday, April 23, 2019
TIME: 1 p.m. Eastern Time
PLACE: 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

1. Introductions and roll call
2. Review minutes of February 28, 2018 meeting.
3. Old Business
 - a. Review Nominations and elect a Chair and Vice Chair person
 - b. Continued review of rule development language for CH. 64E-6, FAC. (TRAP Issues)
4. New Business
 - a. Planned research project to monitor in-ground nitrogen-reducing biofilters
5. Other items of interest to the Technical Review and Advisory Panel
6. Public Comment

Scott Johnson <i>Professional Engineer</i>	Vacant <i>Real Estate Industry</i>	Dewayne Bingham, Jr. <i>Septic Tank Industry</i>	Ron Davenport <i>Septic Tank Manufacturer</i>
Glenn W. Bryant <i>DOH County Health Department</i>	Robert Washam <i>Consumer</i>	Scott Franz <i>Soil Scientist</i>	Elias Christ <i>Environmental Health</i>
Ronald Oakley <i>Local Government</i>	Ken Odom <i>Home Building Industry</i>	Roy Pence <i>Home Building Industry</i>	

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 MINUTES

DATE: Tuesday, April 23, 2019
PLACE: Conference Call, Tallahassee, FL

Members present were:

Robert Washam, *Consumer Representative*
G. Will Bryant, *County Health Department*
Roy Pence, *Home Building Industry*
Dewayne Bingham, Jr., *Septic Tank Industry*
Ron Davenport, *Septic Tank Manufacturer,*
Chair
Kriss Kaye, *Florida Engineering Society*
Scott Franz, *Soil Scientist*
Elias Christ, *Environmental Health*

Alternate members present:

Joseph Sullivan, *Soil Scientist*

Department of Health staff present:

Ed Barranco, *Environmental Administrator*
Robin Eychaner, *Environmental*
Administrator
Dr. Eberhard Roeder, *Engineer*
David Hammonds, *Environmental*
Consultant
Dr. Xueqing Gao
Ed Williams, *Environmental Consultant*
Debby Tipton, *Environmental Consultant*

Absent members and alternates:

Ronald Oakley, *Local Government* Mark
Ken Odom, *Home Building Industry, Vice*
Chair
Scott Johnson, *Florida Engineering Society*
Stephen Shepard, *Septic Tank*
Manufacturer

Others present:

Roxanne Groover, *Florida Onsite*
Wastewater Assoc. (FOWA)
Denworth Cameron, *Presby Environmental*
(via Adobe Connect)
Maurice Barker, *Department of*
Environmental Protection

Kriss Kaye <i>Professional Engineer</i>	Vacant <i>Real Estate Industry</i>	Dewayne Bingham, Jr. <i>Septic Tank Industry</i>	Ron Davenport <i>Septic Tank Manufacturer</i>
Glenn W. Bryant <i>DOH County Health Department</i>	Robert Washam <i>Consumer</i>	Scott Franz <i>Soil Scientist</i>	Elias Christ <i>Environmental Health</i>
Ronald Oakley <i>Local Government</i>	Ken Odom <i>Home Building Industry</i>	Roy Pence <i>Home Building Industry</i>	

1. CALL TO ORDER

Robin Eychaner called the meeting to order at 1 p.m.

Roll call was completed and invited the members of the public introduce themselves. Nine member-represented groups were present.

2. REVIEW MINUTES OF LAST MEETING

The TRAP reviewed the minutes of the February 28, 2019 meeting conference call. Robin asked if anyone has any comments and none were heard. Kriss Kaye made the motion to approve the minutes and Roy Pence made a motion to second. Motion passed unanimously, none opposed.

3. Chair Elections

Robin presented the nominations for Chair Person. One individual, Ron Davenport, accepted the nomination for Chair Person. Ken Odom was nominated for Vice Chair. Ron Davenport was elected Chairperson with a unanimous vote. Ken Odom was elected Vice Chair unanimously. Robin confirmed with Mr. Odom via email, that he indeed accepted the nomination and the position, since he was unable to attend the meeting. Robin turned the meeting over to the new Chair Person, Ron Davenport.

4. OLD BUSINESS

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. There were no comments for changes from the Variance Review Committee. The Department did have several suggested revisions for clarity purposes. It was intended for systems using liners to require design by engineers, so language was added to the preamble to ensure this was clear (lines 8-15). As built requirements were deleted from 7(b) revised to 7(d) and moved to the preamble, to apply to both liner and non-liner INRB systems. Ed Barranco continued to explain each change in detail.

Ron Davenport shared the company he works for, Infiltrator, acquired the Presby Environmental. Presby came to the December 2017 meeting and indicated they own a patent to that type of system. Ron advised he will do whatever the board decides. Ed Barranco indicated they will contact the Departments legal counsel and advise how to proceed later in the meeting.

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 and this language is to update them. There were no comments for changes from the Variance Review Committee.

Kriss Kaye <i>Professional Engineer</i>	Vacant <i>Real Estate Industry</i>	Dewayne Bingham, Jr. <i>Septic Tank Industry</i>	Ron Davenport <i>Septic Tank Manufacturer</i>
--	---------------------------------------	---	--

Glenn W. Bryant <i>DOH County Health Department</i>	Robert Washam <i>Consumer</i>	Scott Franz <i>Soil Scientist</i>	Elias Christ <i>Environmental Health</i>
--	----------------------------------	--------------------------------------	---

Ronald Oakley <i>Local Government</i>	Ken Odom <i>Home Building Industry</i>	Roy Pence <i>Home Building Industry</i>
--	---	--

T E C H N I C A L R E V I E W A N D A D V I S O R Y P A N E L
O N S I T E S E W A G E T R E A T M E N T A N D D I S P O S A L S Y S T E M S
A D V I S O R Y T O T H E D E P A R T M E N T O F H E A L T H
A U T H O R I T Y : S E C T I O N 3 8 1 . 0 0 6 8 , F L O R I D A S T A T U T E S

MOTION to approved 19-02 as submitted by Scott Franz and seconded by Roy Pence.
PASSED Unanimously 8 ayes, none opposed. Motion carried and issue approved as submitted.

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). There was a suggestion for change from the Variance Review Committee on line 12, adding the word “modification.” Scott Franz asked about if repairs being phased in down the road. Is this not the case for the specific BMAP Areas? Ed Barranco indicated, yes, in fact we are creating the language in the rule (64E-6) to allow for the implementation of the BMAP language. Looking at the proposed rule language (lines 11-14) points to the BMAP boundaries of an outstanding Spring unless the BMAP remediation plan otherwise allows. It points to the BMAPS and this language would become effective upon rule adoption. Before existing system modifications or repairs are impacted, DEP needs to essentially modify the language in their BMAPS and the Department then re-adopt those revised BMAPS. However, before the BMAPS can be revised, several items must happen before DEP can modify them. In summary, this language has no impact until the BMAPS are revised by DEP and re-adopted by the Department of Health. Scott synopsis, basically this is getting the language in place so down the road it’s ready and there are no issues.

MOTION to approve Issue 19-04 as submitted by Scott Franz and seconded by Bob Washam.
MOTION PASSED Unanimously 8 ayes, none opposed. Motion carried and issue approved as submitted.

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

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 proposed language is to reflect our authority and makes clarification to how this waste may be kept and stored. The Variance Review Committee made some suggested changes to lines 29, 35, 36-44. IN addition, our legal office wanted the Department to completely remove any reference to land applications and kept some language regarding lime stabilization.

Roxanne was recognized to ask questions. Why do we leave the lime stabilization lines 44-64 in the rule? Ed pointed out the language was included already from the February meeting. If a facility chose to lime stabilize then they can follow this stabilization process.

Roxanne, this could be made a requirement for anyone with a holding or stabilization tank and not a guideline and make them do all this screening, when they are not set up to do this process.

Ed, it wasn’t meant to be for land application, just so they have an option to stabilized for holding.

Eb Roeder suggested looking at lines 198 where it would fit better.

General discussion between Ed and Roxanne to move the language to line 44-64 to between 207-208 and begin the paragraph with “For lime stabilization, excluding septage storage, prior to discharge...” Yes, that would be better. In the future, Roxanne thinks there will be more need for storage tanks.

Motion to approve issue 19-05 as amended by Scott Franz and seconded by Will Bryant.

PASSED Unanimously 8 ayes, none opposed. Motion carried and issue approved as amended.

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

Ed Barranco introduced Issue 19-06 for rule section 64E-6.01001, FAC. Clarifying what is required when making a change to an existing permit, thus requiring the Department to review existing changes and make an amendment. It went to the Variance Review Committee made some suggested changes to lines 46-47, by removing the word “approved” to now refer to them as DEP “regulated” land application site.

TECHNICAL REVIEW AND ADVISORY PANEL
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS
ADVISORY TO THE DEPARTMENT OF HEALTH
AUTHORITY: SECTION 381.0068, FLORIDA STATUTES

The DEP representative, Maurice Barker, on the Variance Board explained they do not permit every regulated treatment facility, mostly de-watering facilities. While they fall under regulation and are approved by DEP, there is no permitting action.

Motion to approve issue 19-06 as written by DeWayne Bingham and seconded by Kriss Kaye.
PASSED Unanimously 8 ayes, none opposed. 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). No amendments by the Variance Review and Advisory Committee.

MOTION to approve issue as submitted 19-07 by Roy Pence and seconded by Bob Washam.

PASSED Unanimously 8 ayes, none opposed. Motion carried and issue approved as submitted.

Revisited: Issue 19-01 Nitrogen-Reducing Media Lined Drainfields

Ed explained the message from legal is, Ron is the industry representative on the TRAP and he was previously a part of one shop or another would not make much difference. You can abstain from the vote, but if he would like to and it doesn't affect a quorum, he can abstain. Ron indicated he would love to abstain and move forward. Ron asked the board was ok with him abstaining. Replies were heard that no one had a problem with it and no one opposed.

Ron asked if there are any further discussions on Issue 19-01.

Kris Kaye suggests using "substantial" conformance. Ed Barranco's concern about being in compliance or out of compliance. Kris shared some other permitting jurisdictions allow substantial conformance and provided some examples. He was asking to soften it somewhat. Ed indicated he appreciated the comments and indicated things must be measurable to make sure the minimum requirements are met. If measurements are above the minimum they are fine.

Roy Pence asked about requirements for replacement of nitrogen-reducing material, does it have to be replaced or updated? Ed states current rule requirements do not require replacement periodically. If failure of the system in a period of less than 10 years you do not have to replace it. If it fails 20 years down the road it does require you to show the nitrogen-reducing material is still functioning and may need replacement. This is applicable to Inground Nitrogen-Reducing Biofilters (INRB) and INRB with liners. Ron asks Eb if lined systems should last longer, Eb states it is plausible and will be known only in the future.

Roy asked if monitoring or testing is required. Ed indicated at this point there is no such requirement. The rule does not prohibit agencies from undertaking additional work on this. There is no sample requirement for homeowners to sample unless there is a failure after 10 years.

Motion to approved was submitted by Will Bryant and seconded by Dewayne Bingham, Jr.

Passed unanimously 7 ayes, none opposed. (Ron Davenport abstained from the vote) Motion carried and issue approved as submitted.

5. New Business:

Dr. Xueqing Gao gave to brief summery to TRAP members on the status of high priority research project establishing a monitoring project for In-Ground Nitrogen-Reducing Biofilters (INRB), which was ranked by the Research and Review Advisory Committee (RRAC) members. Dr. Gao invited all the TRAP members to join the RRAC meeting next Monday April 29, 2019. Robin will be forwarding the meeting invitation, where the power point presentation will be presented. It is still routing for approval, at this time.

The Department would like to monitor at least eight systems once installed. To date, 137 INRB permits have been applied for in Florida Spring Areas and 11 have been installed. This creates a base of

T E C H N I C A L R E V I E W A N D A D V I S O R Y P A N E L
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS
ADVISORY TO THE DEPARTMENT OF HEALTH
AUTHORITY: SECTION 381.0068, FLORIDA STATUTES

systems that we can explore in the Spring BMAP areas. Hoping to get two systems per area to study and monitor once per quarter.

6. Other items of interest to the TRAP

Legislative updates:

Ed Barranco provided an update at the last meeting on the 14 bills we were following in the OSTDS program area. From those 14 there were essentially four bills that proposed a Type II Transfer, transferring the Departments OSTDS program, HB973, SB1022, HB1395, SB1758. HB 973 has moved forward through all three committees and will likely be moving to the floor. The proposed effective date is July 1, 2020 and requires the Department and DEP to provide recommendations, before the end of 2019, on how the transfer can be achieved successfully. The bill deletes the TRAP and RRAC and creates a temporary Technical Advisory Committee (TAC) to provide recommendations to DEP for passive denitrification.

Bob Washam asked if Ed knows what is driving this transfer to OSTDS to DEP? Bob indicated he works nationally and sees this as a step backwards for environmental health and public health. Stating it's just his opinion, with a background in Public Health.

Ron Davenport asked what the next steps for the TRAP issues, (heard today). Robin indicated the next steps are:

1. Next Notice of Proposed Rule Making- next step

This is where we will advertise the actual language that has been developed.

2. Public Hearing

We do not have to automatically hold a public hearing, but we will likely offer one on a specified date, should someone request one.

3. Notice of Change, if necessary

If, as a result, we need to change some of the language we will be required to do a notice of change before filing for adoption.

4. File for adoption, which is the last step.

Ed shared the agency will be working on additional language related to innovative technologies in Florida and streamline the process that is partially in statute and rule. These will keep the TRAP active for the year.

7. PUBLIC COMMENT

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

Ron Davenport made a motion to Adjourn and was seconded by Roy Pence.
PASSED Unanimously, none opposed. Meeting Adjourned at 2:41 p.m.

19-01 ISSUE FOR TECHNICAL REVIEW AND ADVISORY PANEL CONSIDERATION

Printed 4/19/2019 4:53:46 PM

Next Trap Meeting: 4/23/19

Subject: Nitrogen-Reducing Media Lined Drainfields

Rule Sections: 64E.009(7)

Issue: 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: DOH/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: 19-01--64E-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: 2/28/2019

Tabled by Trap:

Trap Review Finished: 2/28/2019

Variance Committee Reviewed: 3/7/2019

Trap Review Variance Comments:

Trap Final Decision:

Final Outcome:

Comments: See also TRAP Issue #15-02
Pass with edits 8 yag; 0 nay 2/28/19
3/7/19 No variance comments.

Ready for Rule 4/15/19 and 4/22/19 DOH clarifications made to lines 8-15,
In Rule 111-113, and 162-163, 202, 219-225.

Rule Date:

1
2 **64E-6.009(7) In-ground Nitrogen-reducing Biofilters (INRB)** – An arrangement of certain
3 types of materials installed in layers underneath a drainfield for the purpose of reducing the
4 mean total nitrogen by acting as a biological filter. ~~INRB Nitrogen-reducing media layers, also~~
5 referred to as media layers, may be placed beneath the drainfield provided the resulting system
6 meets all requirements of this chapter except as noted in this subsection. The removal efficiency
7 for mean total nitrogen (TN) is expected to be a minimum of 65% for all INRB. Where a liner is
8 used as part of the drainfield design, the INRB it must be designed by a professional engineer,
9 and must be installed per paragraph (b) or (c) below. For INRBs using liners, the engineer shall
10 inspect media layer 2 of the system prior to the department's construction inspection. Final
11 system approval must not be granted until the engineer has supplied the following in a report to
12 the department: media layer 2 inspection report; an as-built cross section; a plan view of the
13 installed INRB system; and a statement indicating the system has been installed in
14 conformance with permitting requirements. The engineer media layer 2 inspection report
15 satisfies the media layer 2 inspection requirements of rule subsection 64E-6.009(7)(d). F.A.C.
16 Where paragraph (b) or (c) does not modify a standard found in paragraph (a), the standard
17 found in paragraph (a) shall apply. All repairs or modifications to existing INRB systems shall be
18 required to meet the standards of this subsection.

19 (a) ~~INRB Nitrogen-reducing media~~ layers shall be installed as follows:

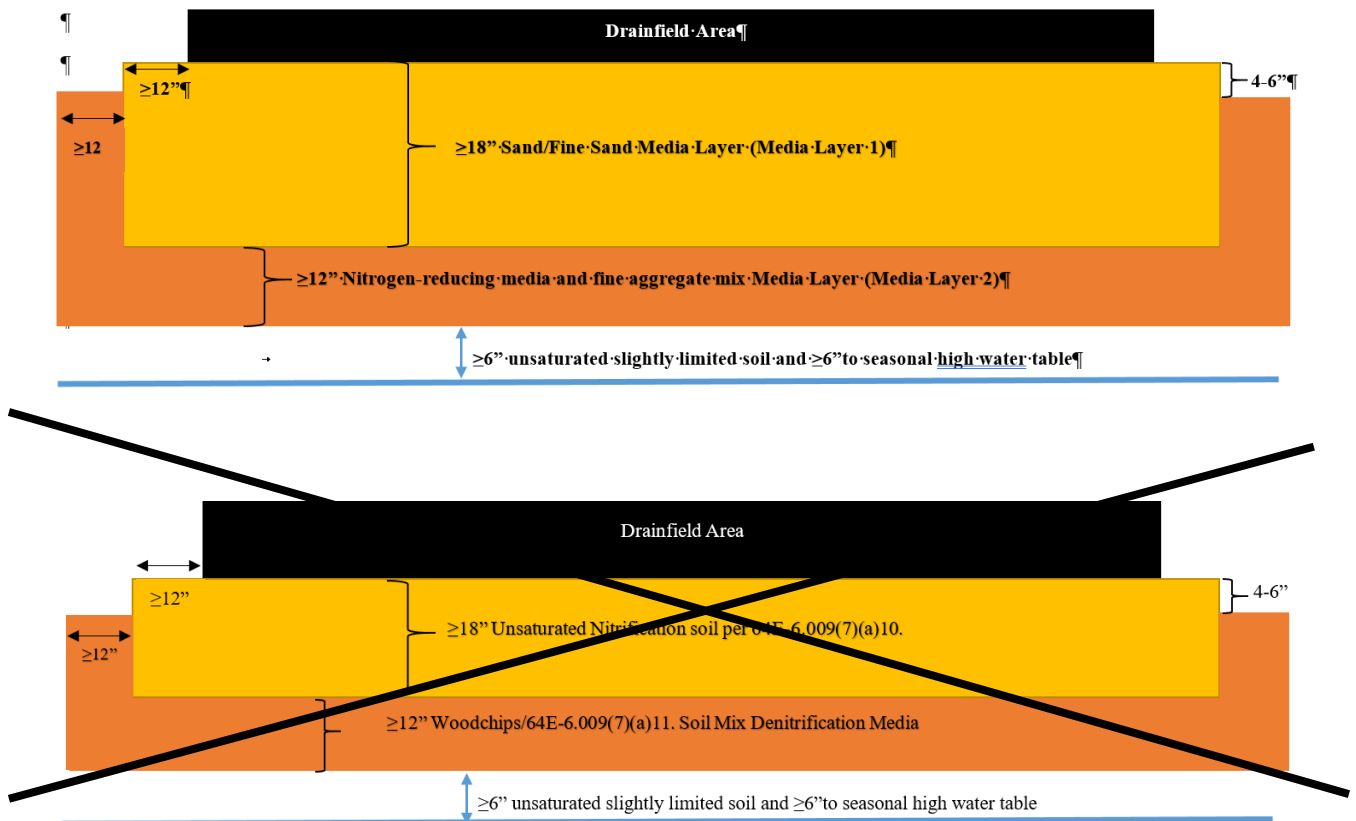
20 1. This layer described in this subparagraph shall also be referred to as media layer 1. The
21 drainfield shall be installed centered over sand fill material that is at least 18 inches thick and
22 conforms to the textures and colors in subparagraph 10. below. Media layer 1 ~~and~~ shall extend
23 at least one foot beyond the perimeter of the drainfield. ~~The drainfield shall be centered above~~
24 ~~the sand fill area.~~

25 2. Below media layer 1 ~~the sand fill material layer required in subparagraph 1. above~~ there
26 shall be a nitrogen-reducing media and fine aggregate mix media layer, also referred to as

27 media layer 2, that is at least 12 inches thick and extends beneath the entire drainfield
 28 absorption surface and extends at least 24 inches beyond the perimeter of any portion of the
 29 drainfield absorption surface and any other effluent release point. ~~The Media layer 2~~ shall also
 30 extend upward along the boundary of media layer 1 ~~the sand-fill material~~ to a point four to six
 31 inches below the bottom of the drainfield. Media layer 1 ~~The drainfield~~ shall be centered above
 32 ~~the media layer 2~~. ~~The Media layer 2~~ shall conform with subparagraphs 8. and 11. below. ~~The~~
 33 ~~media layer shall not be installed when the observed water table is at or above the lowest depth~~
 34 ~~of media layer.~~

35 3. The bottom of the media layer 2 shall be at least 6 inches above the wet season water
 36 table.

37



38

39

40

41 Figure 1. INRB media layer system

42 4. While media longevity and nutrient reduction may be enhanced by the use of low-

43 pressure distribution, any Department-approved drainfield effluent distribution method may be
44 used.

45 5. The natural and existing soil profiles throughout the area of the drainfield ~~and the area~~
46 ~~where the INRB will be placed~~ ~~must shall~~ indicate slightly limited soils extending from the
47 ~~existing~~ ground surface to at least ~~36-6~~ inches below ~~existing ground surface~~ ~~the bottom of the~~
48 ~~nitrogen-reducing media layer.~~

49 6. Only drainfield materials approved per Rule 64E-6.014 or Rule 64E-6.009, F.A.C. shall be
50 used.

51 7. As measured vertically, no portion of the media layer ~~2~~ ~~required in subparagraph 2-~~
52 ~~above~~, shall be within 18 inches of the infiltrative surface of the drainfield.

53 8. An example of nitrogen-reducing media is lignocellulosic material such as chips or
54 shavings of ~~untreated~~ lumber, ~~blended urban waste~~ wood mulch, yellow pine sawdust, or 2-inch
55 to 3-inch wood chips. Lumber that is used as a source of lignocellulosic material must be
56 untreated. The acceptable range of sizes of the individual types of nitrogen-reducing material
57 shall be what is recognized by the industry that produces the materials, and must be routinely
58 available for public purchase. Lignocellulosic material must be free of extraneous non-woody
59 material, for example; plastic, metal, grass, leaves, and any other debris. The nitrogen-reducing
60 media shall be demonstrated in Florida-based studies to be effective at providing a substrate for
61 denitrification.

62 9. The nitrogen-reducing media shall comply with the provisions of Rule 64E-6.0151, F.A.C.

63 10. ~~The soil layer between the infiltrative surface of the drainfield and the M~~media layer 1
64 shall extend beneath the entire drainfield absorption surface and to a point at least one foot
65 beyond the perimeter of any portion of the drainfield absorption surface and any other effluent
66 release point and shall consist of fine aggregate having a texture of sand or fine sand but
67 excluding:

68 a. those having color values less than or equal to 4 with chromas less than or equal to 3; or

69 b. those with colors on the gley charts.

70 11. ~~The Mmedia layer 2 shall be a combination of nitrogen-reducing media and fine~~
71 ~~aggregate, which shall be~~ composed of 40-60% nitrogen-reducing media by volume, with the
72 remainder to be fine aggregate, and must. ~~The media layer shall not be installed when the~~
73 observed water table is at or above the lowest depth of the media layer. The fine aggregate to
74 be mixed with the nitrogen-reducing media shall be one or more of the following textures: sand,
75 fine sand, coarse sandy loam, sandy loam, loamy sand, fine sandy loam, very fine sand, loamy
76 fine sand, and loamy very fine sand; and shall conform to the colors in subparagraph 10. above.
77 ~~The Mmedia layer 2 shall be thoroughly mixed while the soil is in a non-plastic state, with the~~
78 constituents uniformly distributed when installed.

79 12. Where the system has a total required drainfield size over 1500 square feet, the design
80 engineer shall address the potential for mounding of the effluent between the drainfield and the
81 bottom of ~~the~~ media layer 2 at the estimated sewage flow and will increase the separation
82 between the drainfield and ~~the media layer 2 required in subparagraph 2. above,~~ to ensure
83 media layer 1 maintains no less than 18 inches of unsaturated soil beneath the drainfield. A
84 four-inch diameter observation port in the center of the drainfield shall be installed to monitor
85 this parameter. The observation port shall be capped and lockable and installed within a
86 protective surface cover. A toilet flange shall be securely attached to the bottom of the
87 observation port to prevent the port from being inadvertently raised from its installed position.
88 The observation port, including the flange, shall be perforated at the lowest elevation possible to
89 allow accurate measurements. If installed within three feet of the sidewall of a bed or trench, the
90 port shall be grouted to prevent effluent from flowing down the outer surface of the port to the
91 media.

92 13. Drainfield repair shall not necessitate media layer 2 replacement provided the media has
93 been in use for less than 10 years or if sampling within the previous 12 months shows
94 denitrification at or above the target level for mean total nitrogen (TN) removal efficiency which

95 shall be a minimum 65%.

96 14. Setback distances to media layers 1^{one} and 2^{two} ~~the denitrification media or soil~~
97 ~~material directly above denitrification media~~ extending to the infiltrative surface of the drainfield
98 shall be reduced by the following:

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

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

102 c. Setbacks to all other parts of the system shall be in compliance with the requirements in
103 this Chapter and section 381.0065, Florida Statutes.

104 (b) INRB layers with Liner, no underdrain, shall be installed as in paragraph (a) above with
105 the following variations:

106 1. The system drainfield shall be low-pressure dosed unless the professional engineer
107 chooses another method demonstrated to provide adequate nitrification. Lift-dosing may be
108 used provided the design calculations to show that the entire distribution network will be
109 charged with each dose. Only approved drainfield materials per 64E-6.014 or 64E-6.009, F.A.C.
110 shall be used.

111 ~~2. The natural and existing soil profiles throughout the area of the drainfield and the area~~
112 ~~where the INRB will be placed must indicate slightly limited soils extending from the ground~~
113 ~~surface to at least 36 66 inches below existing ground surface grade.~~

114 2. Media layer 2 shall be enclosed beneath and on the lower 6-8 inches of all sides by an
115 impermeable liner composed of polyvinyl chloride (PVC), high-density polyethylene (HDPE),
116 ethylene propylene diene methylene (EPDM) or other material having a thickness of at least 30
117 mils and being certified by the manufacturer for a minimum lifetime of 30 years buried in contact
118 with sewage.

119 3. No portion of the liner or media layer 2 shall be within 18 inches of the infiltrative surface

120 of the drainfield.

121 4. The lowest point of the liner or media layer shall be no less than 6 inches above the water
122 table at the wettest season of the year. There shall be at least 6 inches of unsaturated slightly
123 limited soil between the bottom of the liner and the seasonal high water table.

124 5. Media layers 1 and 2 shall extend beneath the entire drainfield absorption surface to a
125 point at least 3.5 feet beyond the perimeter of any portion of the drainfield absorption surface
126 and any other effluent release point. For repairs, the 3.5 feet dimension may be reduced
127 incrementally to not less than 1.0 feet if necessary to comply with a setback or if physical room
128 is unavailable. Maintaining the 3.5 feet dimension shall have a protection factor of 5 in
129 determining the relative priority of competing factors in the application of rule 64E-6.015 Table
130 V. No part of the liner shall be placed within 18 inches of the pump or treatment tank.

131 6. Media layer 1 shall comply with sub-subparagraph a.10. above.

132 7. Media layer 2 shall comply with sub-subparagraph a.11. above.

133 8. The department shall not require sampling although sampling may be required by the
134 professional engineer, municipality or other state agency as necessary to comply with
135 applicable regulatory requirements.

136 9. Where the system has a total required drainfield size over 1500 square feet, the design
137 engineer shall address the potential for mounding of the effluent between the drainfield and the
138 liner at the estimated sewage flow and will increase the separation between the drainfield and
139 media layer 2 to ensure media layer 1 maintains no less than 18 inches of unsaturated soil
140 beneath the drainfield. A four-inch diameter observation port shall be installed in the center of
141 the liner to allow the liquid level of effluent contained within the bottom of the media liner to be
142 monitored. The observation port shall be capped and lockable and installed within a protective
143 surface cover. A toilet flange shall be securely attached to the bottom of the observation port to
144 prevent the port from being inadvertently raised from its installed position. The observation port,
145 including the flange, shall be perforated at the lowest elevation possible to allow accurate

146 measurements. If installed within three feet of the sidewall of a bed or trench, the port shall be
147 grouted to prevent effluent from flowing down the outer surface of the port to the media.

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

153 Perimeter Loading Rate

154 <u>Soil Texture</u>	154 <u>(gal/ft/day)</u>
155 <u>Coarse sand not associated with a</u> 156 <u>seasonal water table of less than 48</u> 157 <u>inches; sand; and loamy coarse sand</u>	157 <u>5</u>
158 <u>Fine sand</u>	158 <u>4</u>
159 <u>Loamy sand; coarse sandy loam;</u> 160 <u>and sandy loam</u>	160 <u>3</u>

161
162 12. Prior to the department's construction inspection, the professional engineer shall provide
163 an as-built cross section and plan view of the installed INRB system components.

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

167 12. Drainfield repair shall not necessitate media layer 2 replacement provided the media has
168 been in use for less than 10 years or if sampling within the previous 12 months shows
169 denitrification at or above the target level for mean total nitrogen (TN) removal efficiency which
170 shall be a minimum 65%.

171 13. Any seams or penetrations through the liner shall be sealed in accordance with the liner

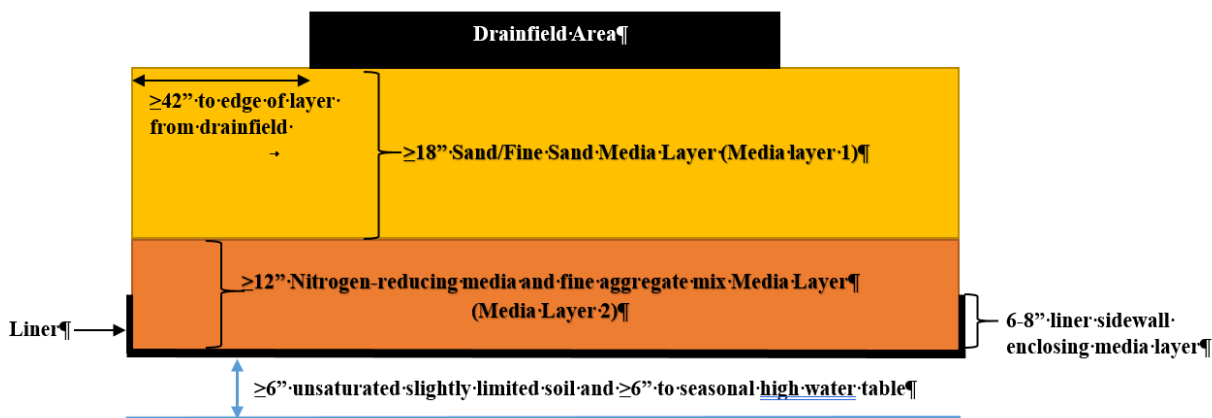
172 manufacturer's instructions to prevent leakage for the life of the liner.

173 14. Setback distances to the liner, or media layers 1 and 2 extending to the infiltrative
174 surface of the drainfield shall be reduced by the following:

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

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

178 c. Setbacks to all other parts of the system shall be in compliance with the requirements in
179 this Chapter and
180 s. 381.0065, FS.



181

182 Figure 2 INRB with Liner without underdrain

183 (c) INRB layers with Liner with underdrain, shall be installed as in paragraph (a) above with
184 the following variations:

185 1. The drainfield shall be installed and centered over media layer 1 which conforms to the
186 textures and colors in subparagraph (a)10. Media layer 1 must extend at least 18 inches past
187 the perimeter of the drainfield.

188 2. Below media layer 1, media layer 2 shall be installed and must extend at least 18 inches
189 past the perimeter of the drainfield. Media layer 2 shall conform with subparagraphs (a)8. and
190 (a)11., above.

191 3. An impermeable liner meeting the construction standards of subparagraph (b)3., above,

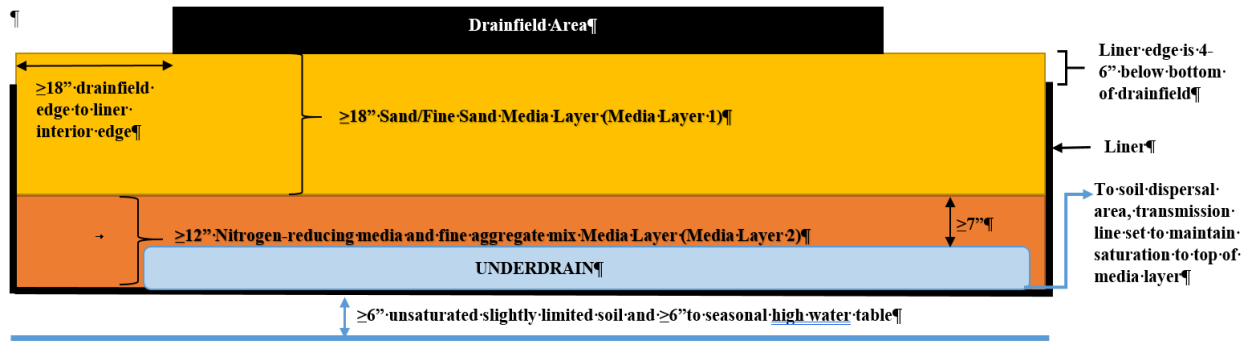
192 shall be installed below media layer 2. The liner's interior surface must extend to a point at least
193 18 inches past the perimeter of the drainfield, at which point the liner shall be directed upwards
194 toward the ground surface maintaining contact with media layers 1 and 2, stopping at a point
195 four to six inches below the level of the bottom of the drainfield. No portion of the media layer
196 shall be less than 18 inches below the infiltrative surface of the drainfield. Media layer 2 with
197 liner shall extend beneath the entire drainfield absorption surface and extend at least 18 inches
198 beyond the perimeter of any portion of the drainfield absorption surface and any other effluent
199 release point. No part of the liner shall be placed within 18 inches of the pump or treatment tank.

200 4. An underdrain shall be installed on top of and in contact with the interior surface of the
201 bottom of the liner within the media layer, and shall disperse to a separately sized, located and
202 installed drainfield. The underdrain shall be designed to maximize effluent movement through
203 media layer 2 into the underdrain. The transmission line from the underdrain to the separate
204 drainfield shall be set to maintain saturation to the top of the media layer. In order to maintain
205 distribution as high as possible above the seasonal high water table and to maintain the most
206 shallow depth to finished grade the transmission line must not have a slope exceeding 1/8 per
207 foot when distributing the effluent to the separate drainfield.

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

213 6. The minimum thickness of media layer 2 as measured between the top of the underdrain
214 and the top of the media shall be 7 inches.

215



216

217 Figure 3 – INRB with Liner with underdrain

218

219 (d) Prior to covering media layer 2, in addition to the inspections required in rule 64E-
 220 6.003, F.A.C., upon completion of the installation of the media layer 2 but before covering the
 221 media layer, a person installing or constructing the system shall notify the DOH county health
 222 department that the media layer 2 has been installed and shall have that portion of the system
 223 inspected by the department. If the inspection of the media layer 2 is the initial inspection of the
 224 system, the initial inspection fee in paragraph 64E-6.030(1)(i), F.A.C., shall be paid. If an initial
 225 inspection occurred before the media layer 2 inspection, the reinspection fee in paragraph 64E-
 226 6.030(1)(j), F.A.C., shall be paid.

227 (c) Renumbered to (e) No changes.

228 (d) Renumbered to (f) No changes.

19-02 ISSUE FOR TECHNICAL REVIEW AND ADVISORY PANEL CONSIDERATION

Printed 4/19/2019 4:54:21 PM

Next Trap Meeting: 4/23/19

Subject: Update ASTM International standard reference

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

Issue: ASTM has confirmed to DOH, 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 will be checked for updates as well.

Issue Originated By: Eb Roeder

Purpose and Effect 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.

Possible Financial Impacts: None

Date New: 1/8/2019

Initially Reviewed by Trap: 2/28/2019

Tabled by Trap:

Trap Review Finished:

Variance Committee Reviewed: 3/7/2019

Trap Review Variance Comments:

Trap Final Decision:

Final Outcome:

Comments: TRAP passed 8 ayes 2/28/19
note ASTM references will be added based on required copy right language.

Ready for Rule

In Rule

Rule Date:

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

64E-6.014 Construction Standards for Drainfield Systems

- (1) No change.
- (2) Header pipe – header pipe, when used, shall be installed in compliance with the following requirements:
 - (a) Header pipe shall meet one or more of the following requirements:
 - 1. ASTM D-3034-~~1698~~, Standard Specification for Type PSM Poly-(Vinyl Chloride)_(PVC) Sewer Pipe and Fittings (~~1998~~), herein incorporated by reference.
 - 2. ASTM D-2729-~~1796~~ Standard Specification for Poly-(Vinyl Chloride)_(PVC) Sewer Pipe and Fittings (~~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/F667M-16, Standard Specification for 3 through 24 in. Corrugated Polyethylene Pipe and Fittings ~~F 405-97 Standard Specification for Corrugated Polyethylene (PE) Pipe and Fittings (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-~~1299~~(2018), Standard Specification for Smoothwall Polyethylene (PE) Pipe for Use in Drainage and Waste Disposal Absorption Fields, herein incorporated by reference. ~~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
28 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
31 pipe and perforated drain pipe shall be installed in aggregate conforming to ASTM C33/C33M-
32 18 ~~C33-86~~ or lightweight aggregate conforming to ASTM C330/C330M-17a ~~C330-87~~ meeting
33 State of Florida Department of Transportation (FDOT) specifications under Section 901,
34 “Standard Specifications for Road and Bridge Construction, January 2019~~1994~~” 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
38 type and design of the proposed absorption system. However, for standard gravity aggregate
39 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
44 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 (2016~~1998~~), herein incorporated by reference, ASTM

47 F667/F667M-16, Standard Specification for 3 through 24 in. Corrugated Polyethylene Pipe and
48 Fittings (2016) ~~F 405-97 Standard 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.

19-04 ISSUE FOR TECHNICAL REVIEW AND ADVISORY PANEL CONSIDERATION

Printed 4/19/2019 4:54:45 PM

Next Trap Meeting: 4/23/19

Subject: Adoption of Basin Management Action Plans (BMAP) by rule reform

Rule Sections: 64E-6.001(4)

Issue: The DEP had adopted individual onsite sewage treatment and disposal systems (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 DOH needs to reference these areas in rule, to ensure system repairs consist of nitrogen-reducing systems.

Issue Originated By: DEP

Purpose and Effect The proposed changes will allow for expanded system repair options in DEP BMAP areas.

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

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.

Possible Financial Impacts: Yes. Nitrogen-reducing systems are more costly than conventional septic systems to install. DEP currently has an incentive grant program available to contractors repairing or modifying conventional systems with nitrogen-reducing systems in areas located in the springs protection and primary focus areas of the BMAP. 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: 2/28/2019

Tabled by Trap:

Trap Review Finished: 2/28/2019

Variance Committee Reviewed: 3/7/2019

Trap Review Variance Comments:

Trap Final Decision:

Final Outcome:

Comments: 2/28/19 Pass TRAP 8 yay; 0 nay
Variance edited adding modification line 12

Ready for Rule

In Rule

Rule Date:

64E-6.001 General.

(1) No change

(2) No change.

(3) No change.

(4) The Department of Environmental Protection, as required by the Florida Springs and Aquifer Protection Act (Part VIII of Chapter 373, Florida Statutes), has adopted individual onsite sewage treatment and disposal system remediation plans and areas to which they apply pursuant to section 373.807(3), Florida Statutes, as part of basin management action plans (BMAP) for several Outstanding Florida Springs, as defined by section 373.802(4), Florida Statutes. In accordance with sections 373.807 and 373.811, installation of new conventional onsite sewage treatment and disposal system or repair or modification of an existing conventional onsite sewage treatment and disposal system is prohibited within the BMAP boundaries of an 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. 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-XXXXX>.

(a) Crystal River/Kings Bay Basin Management Action Plan, June 2018, Appendix D. OSTDS Remediation Plan.

(b) DeLeon Spring Basin Management Action Plan, June 2018, Appendix D. OSTDS Remediation Plan.

(c) Gemini Springs Basin Management Action Plan, June 2018, Appendix D. OSTDS Remediation Plan.

(d) Homosassa and Chassahowitzka Springs Groups Basin Management Action Plan, June 2018, Appendix D. OSTDS Remediation Plan.

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.

35

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, 373.811(2), 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, MM-DD-YY.*

44

45 *Rulemaking Authority 381.0065(3)(a), FS. Law Implemented 373.811(2), 381.0065, FS. History–New .*

19-05 ISSUE FOR TECHNICAL REVIEW AND ADVISORY PANEL CONSIDERATION

Printed 4/19/2019 4:55:07 PM

Next Trap Meeting: 4/23/19

Subject: Land application of sewage, lime stabilization facilities and storage

Rule Sections: 64E-6.010

Issue: The Department of Health's authority to permit land application of sewage operations was removed two years ago. The rule proposal is making the related changes to rule 64E-6.010, FAC, to reflect the Department's current authority.

Issue Originated By: DOH

Purpose and Effect The proposed changes strikes language related to land application of sewage. Clarifies remaining language and permitting requirements for lime stabilization and storage of untreated sewage.

Proposed Rule Change: 19-05--64E-6.010 Land application lime stabolization and storage.docx (See Attached)

Summary: Strikes language related to permitting of land application of sewage. Provides additional clarification for lime stabilization operations and storage of sewage, until it is properly disposed of at a site approved by the Department of Environmental Protection (DEP).

Possible Financial Impacts: None.

Date New: 2/1/2019

Initially Reviewed by Trap: 2/28/2019

Tabled by Trap:

Trap Review Finished: 2/28/2019

Variance Committee Reviewed: 3/7/2019

Trap Review Variance Comments:

Trap Final Decision:

Final Outcome:

Comments: 2/28/19 Pass TRAP 8 yay; 0 nay
Variance addedd edited langauge 3/7/19 lines 26-40
DOH legal provided additional clarification 4/19/19 deleted 36-43

Ready for Rule

In Rule

Rule Date:

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:

25 1. through 3. No change.

26 (b) and (c) No change.

27 (3) through (6) No change.

28 (7) The food establishment sludge and contents from onsite waste disposal systems shall be
29 disposed of at a site approved by the Florida Department of Environmental Protection DOH
30 ~~county health department~~ and by an approved disposal method. Untreated domestic septage or
31 food establishment sludges shall not be applied to the land. Criteria for approved stabilization
32 methods ~~and the subsequent land application of domestic septage or other domestic onsite~~
33 ~~wastewater sludges shall be in accordance with the following criteria for land application and~~
34 disposal of domestic septage.

35 (a) Land application of domestic septage and sludges ~~shall be~~ **is not permitted under this**
36 **chapter.** ~~Chapter 62-640, of the Florida Administrative Code (F.A.C.), defines material treated~~
37 ~~by septage management facilities permitted by the Florida Department of Environmental~~
38 ~~Protection (DEP) under Chapter 403, F.S., as “biosolids” and this material may be land applied~~
39 ~~following the requirements of Chapter 62-640, F.A.C. Where DEP requires treatment of the~~
40 ~~septage and sludges prior to disposal, the septage and sludges shall be provided such septage~~
41 ~~and sludges have been properly treated by an DEP approved septage stabilization process,~~
42 ~~including lime stabilization, and an application using Form DH 4012 has been completed as part~~
43 ~~of the permitting process.~~

44 For lime stabilization, ~~p~~Prior to discharge of septage or food establishment sludge into a
45 stabilization tank, the septage or sludge shall be screened in a pretreatment tank or chamber
46 which contains a final screening method using bar screens having a maximum gap of 1/2 inch
47 or rock screens or other similar mesh material having a maximum 3/4 inch opening. Material
48 retained in the screening process shall be limed, containerized, and disposed of at an approved

49 solid waste disposal facility. Septage or sludge shall pass from the pretreatment tank or
50 chamber to the stabilization tank. Lime stabilization of septage shall be in accordance with
51 processes and designs described in Chapter 6, EPA 625/1-79-011, Process Design Manual for
52 Sludge Treatment and Disposal, hereby incorporated by reference. Facilities approved for
53 septage treatment under this rule shall not receive and treat more than 20,000 gallons of
54 septage or combined septage, grease interceptor, portable restroom or other receptacle waste
55 associated with an onsite sewage treatment and disposal system on any one day and shall not
56 exceed a monthly average of 10,000 gallons of septage or septage and combined domestic
57 waste per day. Stabilization by lime shall raise the pH of the septage to a level of 12 for a
58 minimum of two hours or to a level of at least 12.5 for a minimum of 30 minutes to be deemed
59 sufficient. The pH of the stabilized septage shall be maintained at a level of at least 11 until
60 actual land application, but shall not be landspread until the pH of the stabilized septage has
61 fallen below 12.5. To check the pH of the stabilized septage, a sampling port having an internal
62 diameter of no less than 1/2 inch and no more than 3/4 inch and located no more than 60 inches
63 above the ground surface shall be used to allow sampling of waste tank contents. Lime
64 purchase receipts shall be kept at the place of business for a minimum of 6 months.

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

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

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

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

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

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

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

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

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

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

87 ~~a. Agricultural use plans shall describe the manner in which treated domestic septage and~~
88 ~~sludges are to be used as part of a planned agricultural operation. Methods of application,~~
89 ~~proposed crops and their fertilizer needs, vegetative types proposed, erosion management,~~
90 ~~access control for humans and animals, and anticipated harvesting periods shall be included.~~

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

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

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

96 ~~(b)(c) No person shall dispose of domestic septage or sludge by land application unless they~~
97 ~~have complied with approved treatment and disposal methods described in Rule 64E-6.010,~~
98 ~~F.A.C. Lime stabilization in the tank of a septage hauling vehicle or in the tank of an onsite~~
99 ~~sewage treatment and disposal system is not an approved septage treatment method.~~

100 ~~(d) Land application of septage shall occur only in accordance with paragraph 64E-~~
101 ~~6.010(7)(a), F.A.C., unless prohibited by the DOH county health department due to a brief~~
102 ~~condition which creates a potential for a sanitary nuisance as exemplified in paragraph 64E-~~
103 ~~6.010(7)(l), F.A.C.~~

104 (e) renumbered to (c) No change.

105 (f) Renumbered to (d) No change.

106 (g) Renumbered to (e) No change. A summary of the total volume of septage applied to
107 each site shall be submitted to the DOH county health department quarterly.

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

110 (i) Renumbered to (f) No change. Septage which contains toxic or hazardous waste must be
111 disposed of in accordance with the rules of the Department of Environmental Protection.

112 ~~(j) The land application area shall not be located closer than 3000 feet to any Class I water~~
113 ~~body or Outstanding Florida Water as defined in Chapter 62-302, F.A.C. or 200 feet to any~~
114 ~~surface water bodies except canals or bodies of water used for irrigation purposes which are~~
115 ~~located completely within and not discharging from the site. The land application area shall not~~
116 ~~be located closer than 500 feet to any shallow public water supply wells, nor closer than 300~~
117 ~~feet to any private drinking water supply well. The application area shall be no closer than 300~~

118 feet to any habitable building and a minimum of 75 feet from property lines and drainage
119 ditches.

120 (k) The land application site shall have a minimum 24 inches of unsaturated soil above the
121 ground water table at the time of septage or sludge application. The seasonal high ground water
122 table for the site may be indicated in the Agricultural Use Plan by soil survey maps. If the wet
123 season high ground water table is within 2 feet of the surface or is not determined in the
124 Agricultural Use Plan, the water table encountered at the time of septage or sludge application
125 shall be determined by use of a monitoring well.

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

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

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

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

142 activities.

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

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

147 1. Where the application rate is limited by nitrogen content, the maximum annual surface
148 application rate of total nitrogen is 500 pounds per acre during any 12-month period. Application
149 of septage shall be applied as evenly as possible during the 12-month period to ensure
150 maximum uptake of nitrogen by the crops used. This equates to 6 dry tons or 40,000 gallons of
151 typical septage per acre per year. However, if the following formula, based on the annual uptake
152 of nitrogen for a given crop is used, the 40,000 gallons of septage applied per acre per year
153 shall be increased if the nitrogen content of the septage will not exceed the nitrogen uptake of
154 the crop.

155
$$AAR = N \div 0.0026$$

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

160 2. Where the application rate is limited by phosphorous, the maximum annual surface
161 application rate of total phosphorous is 40 pounds per acre during any 12-month period.
162 Application of septage shall be applied as evenly as possible during the 12-month period to
163 ensure maximum uptake of phosphorous by the crops used. This equates to 2 dry tons or
164 12,000 gallons of typical septage per year. However, if the following formula, based on the
165 annual uptake of phosphorous for a given crop is used, the 12,000 gallons of septage applied

166 per acre per year shall be increased if the phosphorous content of the septage will not exceed
167 the phosphorous demand of the crop.

168 $AAR=P:0.0076$ if the crop demand is calculated for P_2O_5 .

169 $AAR=P:0.0033$ if the crop demand is calculated for P.

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

174 (f) Permanent records of actual application areas and application rates shall be kept. These
175 records shall be maintained by the site owner, lessee, or the land applicator for a period of five
176 years, and shall be available for inspection upon request by the department or by DEP. An
177 annual summary of the total septage or sludge applied shall be provided with the annual update
178 to the Agricultural Use Plan. Records shall be kept and shall include:

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

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

182 3. Dates of septage or sludge land application.

183 4. Weather conditions when applied.

184 5. Location of septage or sludge application site.

185 6. Amounts of septage or sludge applied.

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

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

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

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

190 (s) Renumbered to (g) No change.

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

195 (u) Renumbered to (h) No change.

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

198 (8) Stabilization tanks and septage storage tanks may be located at regional stabilization
199 facilities, or at sites owned or leased by the disposal service. ~~or at sites owned by the owner or~~
200 ~~lessee of the septage land application site. Where leased, a copy of the complete lease~~
201 ~~agreement must be provided as part of the application. The lease must provide for the final~~
202 ~~disposition of all tanks and designate the party to be held responsible for final disposition of any~~
203 ~~tank on a leased facility. Whenever locations or tanks are modified, added or removed, the~~
204 ~~applicant must amend their current service permit application using form DH 4012 and provide~~
205 ~~all current information to the department prior to any changes being made. All changes shall be~~
206 ~~noted on an amended permit, and shall not alter the issue date of the permit. All alterations~~
207 ~~must be inspected by the department at time of installation, as well as after removal of any tank.~~

208 (9) and (10) No changes.

209 *Rulemaking Authority 381.0065(3)(a), 489.553(3) FS. Law Implemented 381.0065, 386.041,*
210 *373.4595 FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.52, Amended 3-17-92,*

211 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,
212 MM-DD-YY.

19-06 ISSUE FOR TECHNICAL REVIEW AND ADVISORY PANEL CONSIDERATION

Printed 4/19/2019 4:55:26 PM

Next Trap Meeting: 4/23/19

Subject: Change in permit conditions requiring a permit amendment

Rule Sections: 64E-6.0101

Issue: 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 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 or stationary holding tanks containing domestic wastewater.

Proposed Rule Change: 19-06--64E-6.0101 Portable restrooms - holding tanks.docx (See Attached)

Summary: 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 or stationary holding tanks containing domestic wastewater.

Possible Financial Impacts: none.

Date New: 2/1/2019

Initially Reviewed by Trap: 2/28/2019

Tabled by Trap:

Trap Review Finished: 2/28/2019

Variance Committee Reviewed: 3/7/2019

Trap Review Variance Comments:

Trap Final Decision:

Final Outcome:

Comments: 2/28/19 Pass TRAP 8 yay; 0 nay
Variance edits lines 46-47

Ready for Rule

In Rule

Rule Date:

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 noted on an amended permit, and shall not alter the issue date of the permit. All alterations
27 must be inspected by the department at time of installation, as well as after removal of any tank.

28 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
33 approved by the DOH county health department. Tanks used for the stabilization and storage of
34 portable or stationary holding tank waste and portable restroom waste shall be constructed,
35 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 ~~and applied under provisions of~~
46 ~~subsection 64E-6.010(7), F.A.C., provided a DEP-approved treatment facility or~~ DEP regulated
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.

51 (v) When disposed of in a department approved lime stabilization facility, the portable
52 restroom, portable hand washing and portable or stationary holding tank wastes shall be
53 blended with domestic septage at a rate of no less than 3 parts septage to 1 part holding tank,
54 portable restroom or portable hand washing facility waste prior to lime stabilization. Treatment
55 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

Printed 4/19/2019 4:55:43 PM

Next Trap Meeting: 4/23/19

Subject: Fees

Rule Sections: 64E-6.030

Issue: Land spreading has been removed from the Department's jurisdictional authority. Therefore, the fee is only applicable to the remaining operations which include lime stabilization and septage storage, prior to disposal.

Issue Originated By: Ed Barranco

Purpose and Effect The proposed changes deletes the land application language, the associated with the fee is reduced by half, and clarification is provided for permitting remaining activities of lime stabilization and septage storage.

Proposed Rule Change: 19-07--64E-030 Fee Draft.docx (See Attached)

Summary: The draft deletes the land application language, the associated with the fee is reduced by half, and clarification is provided for permitting remaining activities of lime stabilization and septage storage.

Possible Financial Impacts: Yes. Fee reduction for reduced regulation.

Date New: 2/1/2019

Initially Reviewed by Trap: 2/28/2019

Tabled by Trap:

Trap Review Finished: 2/28/2019

Variance Committee Reviewed: 3/7/2019

Trap Review Variance Comments:

Trap Final Decision:

Final Outcome:

Comments: 2/28/19 Pass TRAP 8 yay; 0 nay
Variance no edits 3/7/19

Ready for Rule

In Rule

Rule Date:

1

2

64E-6.030 Fees.

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 inspection).	\$50.00
(k) Application for system abandonment permit, includes permit issuance and inspection.	\$50.00
(l) Annual operating permit industrial/manufacturing zoning or commercial sewage waste.	\$150.00
(m) Biennial operating permit for aerobic treatment unit or performance-based treatment system.	\$100.00
(n) Amendment to operating permit.	\$50.00
(o) Tank Manufacturer’s Inspection per annum.	\$100.00
(p) Septage Disposal Service permit per annum.	\$75.00
(q) Portable or Temporary Toilet Service permit per annum.	\$75.00
(r) Additional charge per pumpout vehicle, septage disposal service or portable toilet service.	\$35.00
(s) Septage stabilization facility inspection fee per annum per facility.	\$150.00
(t) Septage <u>stabilization/holding tank inspection disposal site evaluation fee for additional tanks not already permitted or being removed-per tank.</u>	<u>\$100.00</u> 200.00
(tu) Aerobic treatment unit maintenance entity permit per annum.	\$25.00
(uv) Variance Application for a single family residence per each lot or building site.	\$200.00
(vw) Variance Application for a multi-family or commercial building per each building site.	\$300.00

(w*) 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.

(a) Application for registration including examination. \$75.00

(b) Initial registration. \$100.00

(c) Renewal of registration. \$100.00

(d) Certificate of authorization each two-year period. \$250.00

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.*

8