

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: Tuesday, August 27, 2019
TIME: 1 p.m. Eastern Time
PLACE: 4025 Esplanade Way, Room 125-N
Tallahassee, FL 32399
or join by Conference Call
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 May 28, 2019 meeting
3. Old Business
 - A) Innovative System Permitting Process TRAP Issue 19-08 proposed language review
 - Plus Protocol on Innovative System Permits
 - B) Performance Based System Standards TRAP Issue 19-12 formerly Issue 7-23
4. New Business
5. Other items of interest to the Technical Review and Advisory Panel
 - a. Exempting repairs from the last sentence in sub-section 64E-6.015(6)(c)2,FAC, if they meet current rule sizing, presented by Denworth Cameron
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>	

19-08 ISSUE FOR TECHNICAL REVIEW AND ADVISORY PANEL CONSIDERATION

Printed 8/21/2019 3:49:32 PM

Next Trap Meeting: 8/27/19

Subject: Innovate System Permit Process

Rule Sections: 64E-6.002; 6.012; 6.026; 6.027; 6.028; 6.029; 6.0295

Issue: The current issue is regarding a need for standardized streamlined process to more expidiciously issue permits for innovative systems with a strong link to innovative systems evaluation results. The Chapter 120, of the Florida Statutes can be legnthly and the Department would like to have a process identified in rule that meets these new criteria, which would provide a more time-efficient process. Formerly TRAP Issues 08-09 and 10-11.

Issue Originated By: Ed Barranco

Purpose and Effect The proposed changes will Reduce Common Roadblocks to Permitting, Address Common Rule Violations in Code, Provide Clearer Expectations, as well as, Standardize Monitoring Protocols and Evaluation Criteria.

Proposed Rule Change: (See Attached)

Summary: Reduce Common Roadblocks to Permitting
Address Common Rule Violations in Code
Provide Clearer Expectations
Standardize Monitoring Protocols and Evaluation Criteria

Possible Financial Impacts: None.

Date New: 5/3/2019

Initially Reviewed by Trap: 5/28/2019

Tabled by Trap:

Trap Review Finished:

Variance Committee Reviewed:

Trap Review Variance Comments:

Trap Final Decision:

Final Outcome:

Comments: Discussed by TRAP 5/28/19
Proposed language being presented at 8/27/19 meeting

Ready for Rule

In Rule

Rule Date:

TRAP Issue 19-08

Innovative System Permit Process

- 1 64E-6.001 General
- 2 64E-6.004 Application for System Construction Permit
- 3 64E-6.009 Alternative Systems
- 4 64E-6.0152 Innovative Systems
- 5 64E-6.025 Definitions
- 6 64E-6.026 Applications for Innovative System Permits and System Construction Permits
- 7 64E-6.027 Permits
- 8 ~~64E-6.0295 Innovative System Reclassification~~
- 9 **64E-6.001 General.**

10 (1) The provisions of Part I (rules 64E-6.001-6.016, F.A.C.) of this chapter apply to all areas of the state except where specific provisions in
11 part II (rules 64E-6.017-6.0182, F.A.C.), addressing the Florida Keys, or specific provisions in part IV (rules 64E-6.025-6.0295, F.A.C.), addressing
12 performance-based treatment systems, exempt or modify compliance with part I. Part III (rules 64E-6.019-6.023, F.A.C.) addresses the
13 registration of septic tank contractors and authorization of partnerships and corporations. Part V (rule 64E-6.030, F.A.C.) addresses fees for
14 services throughout the chapter. The provisions of this chapter must be used in conjunction with chapter 381 and part III of chapter 489, F.S.

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

18 **64E-6.004 Application for System Construction Permit.**

19 (8) Innovative Systems ~~shall be permitted per rule 64E-6.0152. or new product approval for onsite sewage treatment and disposal systems~~
20 ~~shall be initiated by submittal of an application for permit using Form DH 3143, Jan. 94, hereby incorporated by reference. **[NOTE: DOES THIS**~~
21 ***NEED TO STAY IN SECTION???*** ~~DOH county health departments are authorized to issue installation permits upon receipt of the temporary~~
22 ~~permit. Form DH 3144, Jan 94, and Form DH 3145, Jan 94, hereby incorporated by reference, shall be used to record information that describes~~
23 ~~notification requirements between the temporary permit applicant, the DOH county health department, and the State Health Office. These forms~~
24 ~~are to be processed by the DOH county health departments.~~

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

28 **64E-6.009 Alternative Systems.**

29 (8) Alternative system component and design classification approval – After innovative system testing is completed, requests for approval of
30 system components and designs which are not specifically addressed in this chapter shall be submitted to the department’s ~~Bureau of Onsite~~
31 ~~Sewage Programs Office.~~

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

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

39 (b) through (d) No change.

40 (e) The manufacturer of an alternative product or system, or their agent that has been authorized in writing, must provide training on their

41 product to include all aspects including how the system is to be installed to comply with all DOH regulations, as well as ~~suggested~~ inspection

42 procedures that will enable inspectors to determine the product is installed in compliance with all regulations and approved product specificaitons.

43 The training must be provided at no cost to department personnel and to all persons allowed to install the product, and must be completed in each

44 county prior to any system being installed in that county. Online or vVideo training is allowed provided there is a method by which written

45 questions may be directed to, and answered in writing by, the manufacturer or their designated training entity, who shall be designated in writing.

46 Each county health department's supervisor of the septic tank program must certify all inspectors have viewed the material and were provided an

47 opportunity to discuss any issues with OSTDS management, as well as to call and speak with, or email the manufacturer or their authorized agent

48 or training entity. Any unanswered questions from department personnel precludes system installation in that county until such time as all

49 questions or requests for clarification have been answered in writing by the manufacturer, authorized agent or training entity.

50 *Rulemaking Authority 381.0065(3)(a) FS. Law Implemented 381.0065 FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.49, Amended*

51 3-17-92, 1-3-95, Formerly 10D-6.049, Amended 11-19-97, 2-3-98, 3-22-00, 4-21-02, 6-18-03, 11-26-06, 6-25-09, 7-31-18, XX-XX-XX.

52 **64E-6.0152 Innovative System**

53 (1) Construction permits for an innovative system must not be issued until an applicant makes application for and receives an innovative system
54 permit (ISP) from the Onsite Sewage Program Office (OSP). The department's Protocol on Innovative Systems, July 2019, is hereby incorporated
55 by reference, and shall be referred to as "Protocol" in this section.

56 (2) Innovative system permits require the initial installation and monitoring of at least one system to demonstrate the innovative product's efficacy.
57 After initial system testing provides compelling evidence in the form of data to substantiate applicant's expectations of their product, or if the
58 applicant had sufficient data as defined by Protocol, no less than three innovative systems for treatment components and fifteen innovative
59 systems for disposal components for a specified period of time to be determined based on the individual application, to demonstrate that the
60 system will function properly and reliably to meet the requirements of this chapter and section 381.0065, FS. The maximum number of systems
61 allowed under the innovative system permit shall be twelve for treatment components and seventy for disposal components. Modifications of
62 innovative system design is not allowed during ISP testing.

63 (a) As used in this section, the terms treatment component and disposal component have the following meanings. A treatment component
64 is any part of an innovative system that is intended by the applicant to provide some type of sewage treatment, with or without sewage collection
65 and storage. A treatment component may coexist within or after a disposal component. A disposal component is that part which is intended by the
66 applicant to receive and disperse effluent from a treatment component. Where a single component is intended to provide both treatment and
67 disposal functions, the applicant must adhere to the disposal component criterion for number of systems.

68 (b) During innovative system testing, the intent is to test the innovative product as constructed by, and in the manner intended for use by
69 the manufacturer. When installed, the entire system, including the innovative product itself must comply with all required setbacks, separation to
70 seasonal high water table, effective soil depth and loading rates. Any other regulatory requirement that is not part of the innovative product or does
71 not have direct bearing on the innovative product being tested must be installed in compliance with all applicable regulations.

72 (c) Treatment components which have already been approved as meeting the requirements of 64E-6.012(1) shall not be required to obtain
73 or to be tested under an ISP provided the proposed performance as a performance-based treatment system is no better than the performance
74 reported in the applicable evaluation report. For data evaluation procedures, see the Protocol.

75 (3) The applicant shall be the permit holder and shall be held responsible for all information supplied to the department. The signed
76 application and system design plans serve as the basis by which the department determines the issuance of the innovative system permit. In the
77 event of a change in any information given in the application which served as basis for issuing the innovative system permit or in the installation of
78 the innovative systems as described in the official ISP, the permit holder will immediately file an amended application detailing such changed
79 conditions. If the new conditions are determined to be in compliance with the standards in this chapter, the innovative system permit shall be
80 amended. If the new conditions are determined to be in non-compliance with the standards of this chapter, the permit shall be revoked subject to
81 the provisions of Chapter 120, F.S. An innovative system construction permit application shall be valid for no more than five years. Applications
82 for an innovative system permit shall be made to the OSP on Form DH 3143 08/19, herein incorporated by reference, and must be accompanied
83 by all required exhibits and fees, including all information required in the Protocol. The application and all supporting information must be signed,
84 dated and sealed by an engineer, licensed in the state of Florida. Except as provided for in subsection 64E-6.028(3), F.A.C., alternative drainfield
85 materials and designs shall not be approved which would result in a reduction in drainfield size using the mineral aggregate drainfield system as
86 described in rule 64E-6.014, F.A.C., and the total surface area of soil at the bottom of the drainfield as the criteria for drainfield sizing comparisons.
87 The application must also include a monitoring protocol designed to validate that the system will perform to the engineer's design specifications.

88 While the permit is entitled an innovative system permit, and the entire system can be innovative, it is recognized that where the innovative part is
89 an individual item placed within and intended to be used as part of or in conjunction with the system, and not the entire system, that individual item
90 is that part which is termed innovative.

91 (a) The applicant must respond in writing to requests for additional information within 30 days after receipt of the request. Compliance to
92 the time frame is calculated from the initial request from the OSP. Applicants can request a one-time extension of 30 days during the application
93 process, which must be received by the OSP not more than 14 days after the request for additional information is received by the applicant.
94 Failure to comply will result in a denial of the application.

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

97 (c) Innovative system permits issued by the OSP as of or after the effective date of this rule shall be valid for five years from the date of
98 issue.

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

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

106 (4) Innovative System Permitting- Innovative system permits issued by the OSP shall be issued on Form DH 3145, 08/19. Where the
107 innovative system applicant requires any form of maintenance on the innovative system to be tested, it must be included in the application as well
108 as the ISP. The applicant must provide information as to how and when the maintenance is to be performed, any determining factors which
109 influence the decision to perform required maintenance, and must allow any septic tank contractor to provide maintenance, as long as the ISP
110 applicant has provided training and written authorization to the septic tank contractor.

111 (a) For innovative systems requiring a maintenance contract and operating permit, the applicant must identify, train and certify a
112 maintenance entity, which must be permitted in accordance with the appropriate section of rule, depending on the system or components being
113 used.

114 (b) An innovative system cannot be used as a component to any performance-based treatment system where any benefit is to be received
115 per rule 64E-6.028, F.A.C. However, where an innovative treatment component is used to enhance what would otherwise be a permissible PBTS,
116 the treatment component may be used to further treat the sewage, but no additional treatment level shall be recognized. The component being
117 tested does not receive benefits per 64E-6.028.

118 (5) ISP incorporation into construction permits issued by county health departments- After the OSP has approved the innovative system
119 permit, DOH county health departments will issue system construction permits for individual onsite sewage treatment and disposal systems that
120 include the innovative systems. The county health department must receive a complete application in accordance with Parts I, II or IV of Chapter
121 64E-6, FAC and review the application in accordance with all appropriate requirements. All innovative system permit requirements must be
122 incorporated into the construction permit. The innovative system applicant must concurrently notify the OSP when an application is submitted to
123 the county health department. If the system requires an operating permit, all monitoring requirements in the innovative system permit must be
124 required in the operating permit conditions. An application for system construction permit which intends to incorporate an innovative system or

125 component cannot be reviewed by the county health department until an innovative system permit has been approved by the OSP. The
126 innovative system permit must include the number of systems and time limits that will be allowed during the innovative system testing, as well as
127 what must actions must be taken by the innovative system applicant once the time limit has concluded. All applications for a construction permit
128 that includes an innovative system or component shall be reviewed for completeness by the county health department and then referred to the
129 OSP for review and approval, disapproval or approval with modifications.

130 (a) The design and installation shall comply with the conditions of the innovative system permit and the following additional criteria:

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

133 2. Construction permits issued by the CHD for testing any innovative system requires that the applicant include a separate plan for a
134 system that does not include the innovative system being used. This will include a site plan that shows both systems and how they will be installed
135 in relationship to each other, and how the other system will replace the innovative system should it not perform in compliance with the design. This
136 can be done using the same application, but as a different proposal, which is be required to be used if or when the innovative system does not
137 perform in compliance with the design. This would be permitted and inspected as a new system.

138 (b) The county health department must have received completed form DH 3144, 08/19, herein incorporated by reference.

139 (c)The county health department has completed and filed form DH 3145, 08/19 with the OSP.

140 The OSP has reviewed and approved form DH 3145 and provided that information to the County Health Department.

141 (5) Innovative System Monitoring-

142 (a) After ISP approval, the applicant shall provide quarterly reports to the OSP by the 21st day of the month following the completion of a
143 standard calendar quarter that includes information on the progress of the innovative system evaluation, including a tabular summary of
144 installations and monitoring results. A standard calendar quarter includes the months January through March; April through June; July through
145 September; and October through December. If the 21st day of the month falls on a weekend or holiday, the deadline shall be the close of the
146 following business day. Failure to submit quarterly reports within 45 days of the end of the quarter will result in the termination of the innovative
147 system permit.

148 (b) After the innovative system permit has been issued, the applicant shall provide the following:

149 (8) Following completion of the testing period for all innovative systems installed under the innovative system permit, the applicant and
150 OSP will review the data and decide if continued evaluation will require any revisions to the innovative system permit for continuation of the
151 innovative system permit per [insert reference here].

152 (9) Following the installation and monitoring of the number of systems required by the innovative system permit, and the submission of all
153 required information or results, the applicant may request classification of their innovative system by the OSP. Requests for classification as
154 an alternative system component or system shall be made in accordance with subsection 64E-6.009(8), FAC. Only systems that received final
155 approval from the county health department and were occupied during the entire testing can be used in the department's evaluation for
156 classification. The department shall approve the classification request only if the department is satisfied that the system will reliably perform to
157 the standards for which it is being approved. Evaluation criteria will be per the department's Protocol.

158 a) Requests for classification as an alternative system component shall include the following:

159 1. Detailed system design and construction plans by an engineer licensed in the State of Florida;

160 2. Certification of the performance capabilities of the product submitted by an engineer licensed in the State of Florida;

- 161 3. Research supporting the proposed system materials;
- 162 4. Empirical data showing results of innovative system testing in the state of Florida;
- 163 5. A design, installation and maintenance manual showing how to design and install the system in accordance with this chapter for
164 standard, filled, mounded, gravity-fed, dosed, bed and trench configurations.
- 165 b) Requests for classification as a performance-based treatment system shall include the following:
- 166 1. Complete results and analysis of monitoring of all systems installed;
- 167 2. Complete observations of system performance;
- 168 3. Complete records regarding maintenance, repairs or modifications performed on any systems;
- 169 4. All comments from the system operators and persons using the system, even if seasonal. The innovative system applicant must contact
170 the system operator and all users by email and specifically request their comments regarding their experience in the use and operation of the
171 system, to include any issues or problems that were noted;
- 172 5. The design engineers who designed the individual system designs.
- 173 6. Comments from the county health departments in the counties where the systems were installed;
- 174 7. Specification of the proposed classification as performance-based;
- 175 8. Rationale for the proposed type of classification desired;
- 176 9. Proposed monitoring protocol;
- 177 10. A sample manual addressing the siting, design, installation, inspection, operation, maintenance and abandonment procedures.
- 178 (c) The department shall approve the classification request only if the department is satisfied that the system will reliably perform to the
179 standards for which it is being approved. Evaluation criteria will be per the department's Protocol.

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

181

182 **64E-6.025 Definitions.**

183 ~~(9) Innovative System — as defined by section 381.0065(2)(g), F.S.~~

184 (10) Performance-based treatment system – a specialized onsite sewage treatment and disposal system designed by a professional engineer
185 with a background in wastewater engineering, licensed in the state of Florida, using appropriate application of sound engineering principles to
186 achieve specified levels of CBOD₅ (carbonaceous biochemical oxygen demand), TSS (total suspended solids), TN (total nitrogen), TP (total
187 phosphorus), and fecal coliform found in domestic sewage waste, to a specific and measurable established performance standard. ~~This term also~~
188 ~~includes innovative systems.~~

189 **64E-6.026 Applications for Performance-Based Treatment Innovative System Permits and System Construction Permits.**

190 ~~(1) Applications for innovative system permits — Applications for innovative system permits shall be made using form DH 3143. The application~~
191 ~~and all supporting information shall be signed, dated and sealed by an engineer, licensed in the State of Florida. Except as provided for in~~
192 ~~subsection 64E-6.028(3), F.A.C., alternative drainfield materials and designs shall not be approved which would result in a reduction in drainfield~~
193 ~~size using the mineral aggregate drainfield system as described in rule 64E-6.014, F.A.C., and the total surface area of soil at the bottom of the~~
194 ~~drainfield as the criteria for drainfield sizing comparisons. Applications shall include:~~

195 ~~(a) A monitoring protocol designed to validate that the system will perform to the engineer's design specifications.~~

196 ~~(b) Compelling evidence that the system will function properly and reliably to meet the requirements of this chapter and section 381.0065, F.S.~~
197 ~~Such compelling evidence shall include one or more of the following from a third-party testing organization approved through the NSF~~
198 ~~Environmental Technology Verification Program:~~

199 ~~1. Side stream testing, where effluent is discharged into a system regulated pursuant to chapter 403, F.S.~~

200 ~~2. Testing of systems in other states with similar soils and climates.~~

201 ~~3. Laboratory testing.~~

202 (2) and (3) renumbered to (1) and (2) No change

203 *Rulemaking Authority 381.0011(4), (13), 381.0065(3)(a) FS. Law Implemented 381.0065, 381.0067, Part I 386 FS. History—New 2-3-98, Amended*

204 *6-18-03, 11-26-06, 4-28-10, XX-XX-XX.*

205

206 **64E-6.027 Permits.**

207 ~~(1) Innovative System Permit — An application for system construction permit for an innovative system cannot be reviewed until the innovative~~
208 ~~system permit has been approved specifying the number of systems and time limits. The department's decision to grant or deny the innovative~~
209 ~~system permit shall be based on the presence or absence of compelling evidence that the innovative systems will function properly and reliably to~~
210 ~~meet the requirements of this chapter and section 381.0065, F.S.~~

211 (2) Renumbered to (1), No change.

212 ~~(2)~~ Within 15 working days after the department receives a completed application for a performance-based treatment system, the county
213 health department must either issue a permit for the system or shall notify the applicant that the system does not comply with the performance
214 criteria, and refer the application to the ~~Bureau of Onsite Sewage Programs~~ Office, who shall review the application for a determination whether
215 the system should be approved, disapproved, or approved with modifications. The determination of the engineer for the ~~Bureau of Onsite Sewage~~

216 Programs Office shall prevail over the action of the local county health department. ~~All applications for a construction permit for an innovative~~
217 ~~system shall be reviewed for completeness by the county health department and referred to the Bureau of Onsite Sewage Programs for review~~
218 ~~and approval, disapproval or approval with modifications.~~

219 (4) through (7) Renumbered to (3) to (6), no change.

220 *Rulemaking Authority 381.0065(3)(a) FS. Law Implemented 381.0065, Part I 386 FS. History—New 2-3-98, Amended 4-21-02, 6-18-03, 6-25-09, 4-*
221 *28-10, XX-XX-XX.*

222 **~~64E-6.0295 Innovative System Reclassification.~~ NOTE: TRANSFERRED THIS SECTION LANGUAGE TO 64E-6.0152, or into the**
223 **reference document.**

224 (1) ~~Following the installation and monitoring of the number of systems allowed by the innovative system permit, the applicant may request~~
225 ~~reclassification of their innovative system by the Bureau of Onsite Sewage Programs. Requests for reclassification as an alternative system~~
226 ~~component and design shall be made in accordance with subsection 64E-6.009(7), F.A.C. Requests for reclassification as a performance-based~~
227 ~~treatment system shall include the following:~~

228 (a) ~~Results and analysis of monitoring of the systems installed.~~

229 (b) ~~Observations of system performance.~~

230 (c) ~~Maintenance, repairs or modifications performed on any systems.~~

231 (d) ~~Comments from the system operators or users.~~

232 (e) ~~Comments from the design engineers who designed the individual system designs.~~

233 ~~(f) Comments from the county health departments in the counties where the systems were installed.~~

234 ~~(g) Specification of the proposed classification as performance based.~~

235 ~~(h) Rationale for the proposed type of classification desired.~~

236 ~~(i) Proposed monitoring protocol.~~

237 ~~(j) A sample manual addressing the siting, design, installation, inspection, operation, maintenance and abandonment procedures.~~

238 ~~(2) The Bureau of Onsite Sewage Programs shall process the request in accordance with chapter 120, F.S. The department shall approve the~~
239 ~~request only if the department is satisfied that the system will reliably perform to the standards desired under normal operating conditions as~~
240 ~~demonstrated by the information provided.~~

241 ~~*Rulomaking Authority 381.0011(13), 381.006, 381.0065(3)(a) FS. Law Implemented 381.0065, 381.0067, 386.041 FS. History New 6-18-*~~

242 ~~03Renumbered to 64E-6.0152 XX-XX-XX.~~

1 **Department of Health Protocol on Innovative System Permits**
2 **(draft August 21, 2019)**

3 **1. INTRODUCTION**

4 This document describes how the requirements for innovative system permits established in
5 Rule 64E-6.0152 Florida Administrative Code (FAC) will be implemented. It describes
6 requirements for innovative system permit applications, for testing during the innovative system
7 evaluation period, and for the Department's evaluation of data collected during innovative
8 system testing.

9 **2. OVERVIEW**

10 The overall innovative system process is as follows:

11 **Step 1:** Applicant submits application.

12 **Step 2:** Onsite Sewage Program Office reviews the application, includes assessing the
13 performance and reliability data and testing protocols.

14 **Step 3:** The Onsite Sewage Program Office assesses the application and will request more
15 information until the application is complete. If the application meets all requirements, the Onsite
16 Sewage Program Office issues an innovative system permit (ISP) to the applicant. The ISP will
17 specify if provided data complied with section 5(A)(2) of this document, (in which case to go to
18 Step 4), or if provided data complied with 5(A)(1), (in which case go to Step 6).

19 **Step 4:** Applicant tests one system in Florida for the purpose of providing performance and
20 reliability data and requests to proceed to Step 6.

21 **Step 5:** Onsite Sewage Program Office reviews data according to the criteria of Step 3. If the
22 one system tested achieved the proposed performance level, go to Step 6. If the system does
23 not achieve the proposed performance level, the request to proceed to Step 6 of the innovative

24 system permit application is denied with appropriate Florida Statutes Chapter 120 appellate
25 rights.

26 **Step 6:** Applicant tests multiple systems in Florida under ISP for the purposes of innovative
27 system testing.

28 **Step 7:** Applicant submits a request for classification.

29 **Step 8:** Onsite Sewage Program Office reviews classification request as described in section 6
30 of this document and classifies or denies classification of the technology.

31 **3. DEFINITIONS**

32 (1) Applicant: owner of a proprietary technology or a person desiring the ISP of a public domain
33 or proprietary technology. The applicant may designate an authorized agent.

34 (2) Disposal component: arrangement of equipment and/or materials that distributes effluent
35 within a drainfield.

36 (3) Independent: no employee/employer or subsidiary relationships or other relationships that
37 would impact the independence of the testing organization and the manufacturer.

38 (4) Performance target: the frequency of test systems and observations required to show that
39 the system meets the proposed performance level reliably as described in Section 6 of this
40 document.

41 (5) Proposed performance level: the specific performance measure that the applicant claims the
42 proposed technology can meet and that is being evaluated through testing during the ISP
43 period.

44 (6) Proposed technology: materials, devices or techniques proposed by the applicant to serve in
45 whole or in part in an onsite sewage treatment and disposal system. The technology is
46 characterized by specified system design treatment capacity, structure, configuration, and

47 function mechanism. The technology is also characterized as system treatment component,
48 or system disposal component.

49 (7) Proprietary technology: an onsite sewage technology protected by patent or trademark.

50 (8) Public domain technology: an onsite sewage technology not protected by patent of
51 trademark.

52 (9) Manufacturer: the entity that develops, designs, and produces onsite sewage technology.

53 (10) Testing Organization: the entity that implements the required testing.

54 (11) Test Plan: a written document that describes the procedures for conducting testing
55 according to the requirements of this protocol for a technology for the test systems.

56 (12) Test System: an installation of the proposed technology in for the purposes of innovative
57 system testing.

58 (13) Tested parameter: an observation of interest to evaluate whether a given system, or a
59 technology can meet the proposed performance level in accordance with the performance
60 target, such as effluent concentration, sewage disposal, or other applicable measurable and
61 specific measure of functioning.

62 (14) Treatment component - any arrangement of equipment and/or material that treats
63 sewage in preparation for further treatment and/or disposal. Treatment components may
64 incorporate a disposal component.

65 **4. INNOVATIVE SYSTEM APPLICATION REQUIREMENTS**

66 Application for an ISP must be made to the Onsite Sewage Program Office accompanied by all
67 required exhibits and fees and must include all items required by Rule 64E-6.152 FAC and DH
68 Form 3143.

69 A. RESULTS FROM ALL PREVIOUS TESTING ON PERFORMANCE AND RELIABILITY
70 INVOLVING THE TECHNOLOGY

71 All known data results from testing on performance and reliability must be submitted to
72 the Onsite Sewage Program Office with the innovative system application. For
73 treatment components, reported test results must include all individual sampling data,
74 average, median, concentrations and flows. For disposal components, reported test
75 results must include measurements of water levels within the disposal component,
76 estimated or measured hydraulic and biological loading rates, and surfacing
77 observations. Review of this data by the Onsite Sewage Program is described in section
78 5.A.

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

82 If there are differences between the technology as it was tested and the technology as it is
83 submitted for approval, the applicant must identify and address any differences in
84 configurations.

85
86 C. DESIGN AND INSTALLATION CRITERIA FOR THE TECHNOLOGY

87 The applicant must include the proposed performance level and tested parameter of the system
88 to be tested. For treatment components, the proposed performance level must include at least
89 one annual average for one of the parameters specified in Rule 64E-6.025(10), FAC, and no
90 failure of the system. For disposal components, the proposed performance level will be at least
91 that no water levels measured within the disposal component will exceed 6" above the

92 absorption surface and no failure of the system per Rule 64E-6.002(23), FAC. For specific
93 technologies, other test parameters and performance levels may be appropriate. The installation
94 criteria must address sizing the technology to estimated sewage flows ranging from 200 to 5000
95 gallons per day and to different domestic and commercial wastewater strengths and
96 characteristics. The applicant shall propose instructions on how to inspect the technology at
97 time of construction to establish that the installation meets the applicant's specifications and
98 Florida's requirements.

99 D. PRODUCT LITERATURE

100 The applicant must provide product literature meeting the applicable requirements of
101 Section 6 and 7 of NSF/ANSI 40-2018 (owner's manual, additional product literature
102 including installation manual, operation and maintenance manual, troubleshooting and
103 repair manual, and "other documentation" as described in Section 7).

104 If the product literature is not for the Florida market and conflicts with or is inconsistent
105 with Florida Rule, the applicant must provide a Florida supplement or version that
106 complies with Florida's regulations.

107 E. WARRANTY COVERING REPLACEMENT OF THE SYSTEM IN CASE OF FAILURE 108 DURING THE INNOVATIVE TESTING.

109 A five-year warranty by the applicant to the owner of an installed innovative system to
110 provide and pay all costs for system permitting, engineering services, contractor
111 equipment, and material and labor necessary to secure permits and modify the system
112 or repair the system with a department-approved non-innovative system in case of
113 failure that is not due to owner-non-compliance with operating and maintenance
114 instructions. Procedures to address system malfunction and replacement, premature

115 termination of the testing protocol and innovative system evaluation, and criteria for
116 removal of the system at the end of the evaluation or warranty period must also be
117 provided.

118 F. CONSUMABLES MEETING REQUIREMENTS OF 64E-6.0151, AND ESTIMATED
119 REPLACEMENT INTERVALS AND METHODS, IF APPLICABLE

120 G. A TEST PLAN DESIGNED TO VALIDATE THE PERFORMANCE AND RELIABILITY OF
121 THE INNOVATIVE SYSTEM IN FLORIDA

122 All test plans must identify the testing organization and provide testing protocols. Test plans for
123 treatment components must also identify the laboratory to be used and submit a quality
124 assurance project plan (QAPP). The testing organization must be independent and have
125 knowledge and experience in conducting such testing.

126 Test plans must address the following: method of water use monitoring, sampling/monitoring
127 points for all measurements to obtain complete and representative observations,
128 sampling/monitoring procedures, how often testing will occur, the duration of the testing, and
129 field observations, such as indicators of failure. If applicable, testing protocols must identify what
130 parameters will be analyzed in the laboratory, what parameters will be measured in the field,
131 and what laboratory will be used. The laboratory identified for testing must either be accredited
132 by a recognized National Environmental Laboratory Accreditation Program (NELAP)
133 accreditation body or maintain a comprehensive quality assurance program that, at a minimum,
134 complies with the requirements of ISO/IEC Guide 17025 General Requirements for the
135 Competence of Calibration and Testing Laboratories and demonstrate it is qualified to perform
136 the assigned analyses in accordance with required methods.

137 The quality assurance project plan must include blank and duplicate sample collection
138 procedures in the amount of at least 10% and chain of custody procedures.

139 i. TESTING FOR TREATMENT COMPONENT EFFECTIVENESS

140 Testing for treatment component effectiveness must result in valid sampling data from a
141 minimum of four quarterly testing events gathered from each of at least three systems. Quarterly
142 testing events must occur at least 10 weeks and no more than 16 weeks apart.

143 ii. TESTING FOR DISPOSAL COMPONENT EFFECTIVENESS

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

148 H. AN INDEPENDENT THIRD-PARTY TESTING ORGANIZATION REPORT, OR A FLORIDA
149 LICENSED ENGINEER REPORT EVALUATING THE TECHNOLOGY

150 **5. ONSITE SEWAGE PROGRAM APPLICATION REVIEW**

151 The Department will review the application materials listed in Form DH 3143 and described
152 above in Part 4, in accordance with the criteria below.

153 A. PERFORMANCE AND RELIABILITY DATA REVIEW

154 As part of the application review process, the Onsite Sewage Program Office will review the
155 data results on performance and reliability to evaluate if there is "...compelling evidence that the
156 system will function properly and reliably..." prior to innovative system testing as required by
157 381.0065 (3), Florida Statutes. Performance and reliability requirements can be met by
158 supplying data meeting requirements of 5.A.1. If the data does not comply with requirements of
159 5.A.1 but does comply with requirements in 5.A.2, then the applicant must test one system in
160 Florida using the testing protocols described in 4.G in order to obtain data meeting 5.A.1.

161 1. PERFORMANCE AND RELIABILITY DATA REQUIREMENTS – LEVEL A

162 To comply with performance and reliability data “Level A” requirements, the data must
163 demonstrate that the proposed test system of the technology is capable of achieving the
164 proposed performance level and meet **all** the following conditions:

165 (a) Full-scale testing with an average measured daily domestic or commercial strength sewage
166 waste flow as defined by Rule 64E-6.003(13) and (15), FAC, of at least 200 gallons per day and
167 not more than 5000 gallons per day.

168 (b) The results of tests include all influent and performance conditions, from observations in at
169 least eight separate weeks over at least five months for treatment systems and over at least 12
170 months for disposal systems. The results shall show that average result and results of each
171 individual evaluation meet the designated performance level.

172 (c) The testing of the system met **all** of the following criteria:

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

175 ii) The testing organization has knowledge and experience in conducting such testing.
176 Entities that perform certification testing for organizations accredited to ISO/IEC
177 17065:2012 (Conformity assessment - Requirements for bodies certifying products, processes and
178 services)], testing during EPA’s national demonstration projects, testing by
179 government agencies and contractors for government agencies that regulate onsite
180 sewage components or wastewater treatment shall be deemed to comply. Other
181 entities, including department-accredited analytical laboratories, faculty or staff of an
182 accredited college or university, must provide documentation demonstrating staff
183 competence, knowledge and experience in environmental testing.

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

192

193 2. PERFORMANCE AND RELIABILITY DATA REQUIREMENTS – LEVEL B

194 Test data meets Level B requirements if they demonstrate that the test system is
 195 capable of the proposed performance level on average and each test event individually
 196 and the data score at least a level of 7 using the following rubric:

197 Rubric: For each attribute of a reported test, score the grade. Multiply the grade by the
 198 relative weight. Sum up all weighted grades for all attributes.

199

Point rating/ Criteria	Scale up	Amount of data on test parameter	Data source	Test result data quality documentation	Tested System documentation	Knowledge base
Weight	2	2	1	1	1	1
0	No experimental data	none	Data collected by applicant	Unknown	none	Contradicts common knowledge
1	Synthetic sewage/ up to 20 gpd	Less than five or less than three months	Data collected by maintenance entity	Unknown/unqualified sampling but lab procedures standardized	Schematic drawings	Speculative

2	Real sewage/20 up to 200 gpd or over 5,000 gpd	Less than eight or less than four months	Independent and: University study, Consulting company, or professional engineer	Documented sampling procedures, Chain of custody, standard lab procedures	Dimensioned as-built, installation manual	Established processes
3	Real sewage ≥ 200 to 5,000 gpd	eight or more and five or more months	Certification testing entity	With documented QAPP, results of duplicates and blanks; lab certified to NELAP, ISO...	Installation, operation and design manual meeting NSF40 or equivalent requirements	Textbook

200

201 **6. INNOVATIVE SYSTEM DATA EVALUATION PROCEDURES FOR CLASSIFICATION**

202 Permit applicants must provide data collected during innovative testing and provide it to the
 203 Onsite Sewage Program Office per the classification procedures described in 64E-6.0152(X).
 204 The Onsite Sewage Program Office will review the data to evaluate if they demonstrate that the
 205 proposed technology will function and meet the reliability performance target for the proposed
 206 performance level. This section describes the Onsite Sewage Program Office's data review
 207 process that will be used to evaluate the data to determine whether a tested technology meets
 208 or exceeds the performance target.

209 1. TREATMENT COMPONENT TARGETS

210 For treatment test systems to pass innovative system testing, they must achieve the annual
 211 average performance standard target and the individual grab sample performance standard
 212 target.

213 I. ANNUAL PERFORMANCE STANDARD TARGETS

214 The department will calculate the median value for each test system and each test
 215 parameter sampled for and will determine if the median value of each test system achieves

216 or fails to achieve the proposed annual average performance standard for each parameter.
217 Using Table 1, the department will use the number of systems tested and the number of
218 systems that achieves the proposed performance level to determine if the annual
219 performance standard target was met.

220 II. INDIVIDUAL SAMPLE PERFORMANCE TARGETS

221 The department will determine whether each individual data point achieves or fails to
222 achieve the proposed individual performance level for each parameter. Using Table 2, the
223 department will use the total number of individual samples and the number of individual
224 samples that achieve the proposed performance level, to determine if the individual sample
225 performance target was met.

226 2. DISPOSAL COMPONENTS TARGET

227 The department will review the data collected by the systems and will determine whether
228 each system achieves for fails to achieve the proposed performance level. Using Table 3,
229 the department will use the number of systems tested and the number of systems that
230 achieves the proposed performance level to determine if the target was met.

231

232 **TABLE 1. MINIMUM NUMBER OF DATA POINTS REQUIRED TO MEET THE ANNUAL PROPOSED**

233 **PERFORMANCE LEVEL*(TREATMENT SYSTEMS)**

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

234 **The target is to be 90% confident that more than 50% of data points meet the proposed*

235 *performance level. Median system treatment performance compared to average treatment*

236 *standard in 64E-6.025.*

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

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

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

39	33		69	57
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242 *The target is to be 90% confident that more than 75% of the data points meet the proposed
243 performance level. Grab sample treatment performance compared to grab sample standard in
244 64E-6.025.

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

248 **TABLE 3. MINIMUM NUMBER OF DATA POINTS REQUIRED TO MEET THE PROPOSED PERFORMANCE**
249 **LEVEL (DISPOSAL COMPONENTS)**

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

Total Number of Test Systems	Number of Systems Required to Meet the Proposed Performance Level		Total Number of Data Points	Number of Systems Required to Meet the Performance Level**
37	36		64	61
38	37		65	62
39	38		66	63
40	39		67	64
41	40		68	65

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

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

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, August 27, 2019
PLACE: 4025 Esplanade Way, Room 125N, Tallahassee, FL 32399

Members present were:

Elias Christ, *Environmental Health*
Ron Davenport, *Septic Tank Manufacturer, Chair*
Kriss Kaye, *Florida Engineering Society*
Roy Pence, *Home Building Industry*
Robert Washam, *Consumer Representative*

Alternate members present:

Joseph Sullivan, *Soil Scientist*
Scott Johnson, *Florida Engineering Society*

Department of Health staff present:

Ed Barranco, *Environmental Administrator*
Robin Eychaner, *Environmental Administrator*
Dr. Eberhard Roeder, *Engineer*
David Hammonds, *Environmental Consultant*
Ed Williams, *Environmental Consultant*
Debby Tipton, *Environmental Consultant*
Kim Duffek, *Environmental Consultant*
Marcelo Blanco, *Environmental Manager*
Audra Burchfield, *Environmental Consultant*
Alan Willett, *Environmental Consultant*

Absent members and alternates:

Dewayne Bingham, Jr., *Septic Tank Industry*
G. Will Bryant, *County Health Department*
Scott Franz, *Soil Scientist*
Ronald Oakley, *Local Government*
Ken Odom, *Home Building Industry, Vice Chair*
Stephen Shepard, *Septic Tank Manufacturer*

Others present:

Roxanne Groover, *Florida Onsite Wastewater Assoc. (FOWA)*
Denworth Cameron, *Presby Environmental*
Jim Craft
Chris Row, *Advanced Drainage Systems*
Kevin Sherman
Pam Tucker

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 1:00 p.m.

Roll call was completed and she also invited the members of the public introduce themselves. Six panel members or their alternates were present. Roxanne Groover indicated Dewayne Bingham was out with a medical emergency.

Robin mentioned the meeting advertisement in the Florida Administrative Register (FAR) was inadvertently advertised for one day less than the required seven days in advance of the meeting. As a result, at the next meeting it will need to be ratified, which would essentially require the minutes to be read and the floor opened for comments, suggestions, or changes to the meeting on 8/27/19.

Next Robin shared some potential dates for the September (24, 25, 26, 27) and October (22, 23, 24, 25) meetings, which will be in Orlando. The time choices will be 9 AM-12 PM or 1PM-4PM. There will be a conference call number available for those who cannot attend in person. Robin will be sending out a survey to the members regarding their availability, once she gets the information on the availability of the conference room in Orlando.

Before turning the meeting over to Ron Davenport, Robin mentioned a couple typos she corrected on the minutes the night before, so she highlighted those changes in yellow and share it on the Adobe Connect for everyone to view live.

2. REVIEW MINUTES OF LAST MEETING

The TRAP reviewed the minutes of the May 28, 2019 meeting conference call. Ron Davenport presented the pages with the following results:

1. Kriss Kaye made a motion to approve page 1 as amended and seconded Joe Sullivan. Unanimously approved, motion passes, none opposed, pages 1 approved.
 2. Motion to approve page 2 by Elias Christ and seconded by Joe Sullivan. Unanimously approved, motion passes, none opposed, page 2 approved.
 3. Motion to approve page 3 by Kriss Kaye and seconded by Joe Sullivan. Unanimously approved, motion passes, none opposed, page 3 accepted.
 4. Motion to approve page 4 as amended by Joe Sullivan and seconded by Elias Christ. Unanimously approved, motion passes, none opposed, amended page 4 accepted.
- Ron Davenport indicated May 28, 2019, minutes are approved as amended.

3. OLD BUSINESS

- A) Innovative System Permitting (ISP) Process; TRAP Issue 19-08 proposed language review
- Plus, Protocol on Innovative System Permits

Ed Barranco delivered a PowerPoint presentation via Adobe Connect (live) on Innovative/Performance Based Treatment System (PBTS) Rule Revision. See handouts. Ed Barranco went over the proposed Innovative System Permitting (ISP) and Testing process [application, installation and evaluation, reclassification, and Performance Based Treatment System (PBTS) or Alternative

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>	

System]. He explained Level A data and Level B data. Level A data which allows for testing of several systems under the ISP; broader than current requirements. Level B data allows lesser quality data plus testing of one system in Florida. Level A data moves straight to proving the “Compelling Data” requirement in statute. This requires testing a minimum of three systems for treatment; or a minimum of 15 systems for disposal. Level B data, would have to start with testing one system (in the ground) in Florida and once successfully completed, move to the “Compelling Data” requirement and related testing, as mentioned with Level A.

Rule violations are currently addressed upfront with Chapter 120, Florida Statutes (FS), variances, which can take from three to many more months to complete, because most do not have “Compelling Data.” In the current draft, the proposal is requiring testing of the innovative product, as constructed by and in a manner intended for use, by the manufacturer. This means they can simultaneously gather “Compelling Data” while testing the one system in Florida. Switching to this new process will provide clearer application requirements and set a timeframe for the applicant to respond to Department requests for information, which together will decrease the time needed to move through the process steps.

A Monitoring/Testing Protocol has been drafted to require a minimum number of systems tested (3/15). Testing requirements for treatment and disposal components, during innovative testing, are standardized and required as part of the application.

Lack of adherence of the ISP has been an issue. When this happens, we must assess if we can keep the data on the system as part of the data analysis or not, because the testing protocol was not followed. Solution is to amend the process and asking for training on how to install and monitor these systems. Training for contractors, installers, Department field staff, etc. We would like to hear from the manufacturers, since this is a challenge, but we need to talk about it to make things smoother. There is more guidance about this in the proposed protocol, that we will get to later.

Permitting Systems as a Performance Based Treatment System (PBTS). Why should we test for a system with all those extra layers of requirements (maintenance, property records, entity operation permits, etc.)? Why not during the testing, hold up on that, give us a little more leeway during testing, a less complexity and get through the testing in a more effective way? The proposal strikes innovative system portions in the rule and creates a new section just for ISP, with a subsection to address maintenance contracts and operating permits required if manufacturer requires maintenance.

Evaluation Criteria was developed to evaluate all treatment products and all disposal products in a standardized manner (Protocol Section 6). A minimum of three systems tested for performance components and minimum fifteen tested for disposal components.

Other issues addressed. Currently, ATU-treatment for nitrogen, phosphorus and fecal coliform needs to be evaluated under an innovative system permit. Such (secondary or advanced secondary) treatment is required by PBTS for the purposes of reduced setbacks and increased authorized sewage flows. The draft proposal includes subsection 64E-6.0152(2)(c) for Aerobic Treatment Units (ATUs) meeting the requirements of 64E-6.012(1) and are not required to be innovatively tested, provided the proposed performance as a PBTS is not better than reported in the completion report and systems are installed in the certified and tested configuration.

Ron Davenport thank Ed for the presentation and proposed to go through the Issues presented page by page. Ed Barranco synopsisized each page.

Page 1: Line 8 is deleting rule 64E-0295 Innovative System Reclassification. Line 11 the 5 is stricken.

Page 2: Line 19-24 refers to the new section 64E-6.0152 and deletes the remaining verbiage.

Line 29 is adding the word classification and in 30-31 deletes “Bureau of,” and “s” on Programs and adds Office. Scott Johnson pointed out that on line 19 after innovative systems it say’s “shall”, and I believe the word “must” has replaced shall as it has been in the rest of the document. A general comment from Scott Johnson indicates spell checking the document will correct many errors. The word “must” should replace “shall.”

Page 3: In line 34 changing the uppercase S to a lower-case s. In lines 40-49 adding subparagraph (e) to part of the application process, for a manufacturer or their agent, regarding providing training to those persons who will install the product and DOH inspections. Ron Davenport asked if DOH reached out to any manufacturers about this section. Ed Barranco indicated we did not reach out to any manufacturers, as the ones we know about are already approved in Florida. This is more for those who are not yet approved in the state. He indicated if there is a listing available, we would be happy to reach out to them. Ron wanted to verify the manufacturer was still able to control who they allow to install a system. David Hammonds and Ed Barranco confirmed they would, in addition to including all the inspectors with training on how to install the system. Roxanne Groover shared her concerns regarding training the DOH inspection staff and their availability to attend training before installation. Roxanne feels training up front versus training in the field is not very practical. She doesn't feel it will be a challenge to train the installers. Specific concern was manufacturers now must be technology gurus to create online training. In the past everyone went to the job site and learned together how to do the installation. She doesn't think people choose not to do the training, just the DOH staff are overwhelmed with all their other responsibilities like responding to blue/green toxic algae, complaint investigations, and are 2 weeks behind in permitting or inspections. Ed Barranco indicated we will continue to look at it, refine it, and try to make it as practical as possible to help the process.

Page 4: This portion gets into the innovative system rule, which Ed Barranco delivered a presentation on, lines 52-67 contain new language. This page is primarily for the applicant to know what DOH needs to receive from them. The protocol will further detail what items are needed. Scott Johnson suggested we just pause at each page and allow for any comments, since people have read the material. Ron Davenport asked Ed Barranco to provide a higher-level overview for each page. Ed provided an overview of the page contents. No comments.

Page 5: Lines 68-87. Ed explained, this page contains details on what we are waiving in other areas of the rule, so they can test their innovate technology. No comments.

Page 6: Lines 88-105. Ed briefly described this section of the draft. Roxanne Groover liked a lot of it but has concerns on line 91 which specify with how you want them to respond. Sometimes one party or another thinks they met the requirement by giving information verbally, but the other party doesn't think so because it's not in writing. If we can get clarification on a formal request for information and the response to it. Roxanne opened the modification discussion, by asking does a modification request made by the DOH require the manufacturer to get a new permit? Is this type of modification going to require a permit? Ed Barranco responded by indicating that the Department was in the past trying to be helpful, to assist in getting people through the 120-variance process. This new process will only be looking solely at what is submitted and nothing else. The expectation would be the applicant, would have to take any issues home and work on a solution. David Hammonds explained we will only be testing the one thing (widget) proposed and then it's done. No modifications are allowed during testing. Roxanne suggested only communicating with one-point source on the applicant's part, as there are sometime three or four people commenting about something and it get confusing. Anybody under innovative standards, their permits are going to expire. Is anyone going to notifying these folks with innovative application is expiring after 30 years of being in limbo? Ed Barranco, referred to the protocol. The systems that were tested will remain permitted. However, if they fail or testing does not go well, then we must stop. Roxanne then referred to line 99, "ISPs issued more than five years prior to the effective date of this rule expire 180 days after the effective date of this rule." Roxanne commented there are a lot of those out there. Who is noticing those manufacturers and the homeowners, when the manufacture decides to let it expire? Ed Barranco indicated we will give it some thought and indicate who will be responsible for it. No other comments.

Page 7: Lines 106-124. Ed Barranco explains the proposed language on this page to the group. Those ISPs requiring maintenance entities will have to identify those which will need to be trained and certified to perform the maintenance. Line 114, David Hammonds explained the innovative systems cannot be used as a component to any performance-based system where you will be receiving any benefit (no set back relief or any additional flow) per that section of the rule. These are innovative product and if the system completely blows up, we must meet all the setbacks as this has not been

tested. Ed Barranco explained how the construction permits will get to the Health Departments and our involvement with the county health department with innovative system permitting. Scott Johnson had a question about the information starting on line 124 and going on to page eight. It starts out saying the application for a system construction permit cannot be reviewed by the county health department until the innovative system permit has been reviewed by OSP. Then you go to line 127 where it states all applications for a construction permit that includes an innovative system, or a component shall be reviewed for completeness by the county health department and then referred to OSP. It seems these two sentences contradict each other. Ed Barranco replied explaining, in lines 124 and 125 it says the health department cannot look at an innovative system/product application for a permit until it first has gone through the program office's innovative systems permitting process. What the other line says (127), is all construction applications the health department receives for construction permits must be reviewed. The second part is only referring to the construction portion. This is the application process for construction permitting and not for innovative system permitting. David Hammonds was asked to explain the difference between the two processes. No body get a permit from the health department, until the department has given them an innovative system permit. Once the innovative system permit is issued the health department can then issue an individual construction permit. Before the CHD issues the construction permit, they will send all the information back to OSP (Eb), so we can ensure the innovative system information is incorporated into the construction permit correctly. Scott Johnson requested, if you could look at the wording to so it's not too confusing, are you submitting to the health department first for completeness or is it Tallahassee first. Joe Sullivan stated if you have a Venn diagram or step by step diagram it might help clarify the process somewhat. The wording looks ok to me. A Venn diagram would be able to show the innovative system needs to be qualified (at the program office) and then county (health department) must permit the construction of the system. By listing the interim steps in there and the diagram would be able to show those steps. Ed Barranco, ok. No other comments.

Page 8: Line 130-140. Ed Barranco explained the general language being proposed. No questions or comments made.

Page 9: Lines 141 and 142-160, Ed Barranco explained the general language being proposed. Ron Davenport asked what we were going to reference in line 151. Ed Barranco indicated that reference might be an incomplete thought. We will note this and come back and complete it. No other comments or questions.

Page 10: Lines 161 – 180, Ed Barranco synopsised the proposed language. Bob Washam, at the end of line 179 is there any reason why the word Protocol is capitalized? Ed replied that is referencing the actual Department of Health protocol for Innovative System Permits, we've been referencing (in the document). Bob Washam, can your use a parenthetical reference after the word protocol? Ed Barranco, yes. This is David Hammonds, I think I solved the mystery from page 9 line 151. In context sub section eight. If you will go back to page 6 in line 102, where it says it the applicant or successor of the ISP can request a five-year extension. No other questions or comments on page 10.

Page 11: Lines 181-198, Ed briefly described this section of the draft. No questions or comments on page 11.

Page 12: Lines 199-215, Ed Barranco synopsised the proposed language. David Hammonds shared that line 202 should not be struck. No other questions or comments on page 12.

Page 13: Lines 216-232 Ed Barranco explained the general language being proposed. No questions or comments on page 13.

Page 14: Lines 233-242 Ed Barranco explained the language being stricken. No questions or comments on page 14.

Department of Health Protocol on Innovative System Permits: (15 Pages 1 hour of discussion 02:15:00 start) Debby Tipton lead the review of the protocol. The purpose of the protocol is to add a lot of the details that are not part of the rule for this proposed process.

Page 1: Lines 1-23 Debby provided a general overview concerning the language on this page. Scot Johnson asked which step is the one that the manufacture would make application to the Health

Department. Debby replied, she has made a note during the previous rule decision, to put some language to clarify it more on line 26. No other comments on this page were received.

Page 2: Lines 24-46 Debby Tipton synopsised the page and no comments or discussion we received.

Page 3: Lines 47-68 No comments were received, or discussions occurred.

Page 4: Lines 69-91 Debby provided a brief overview for sections A, B, and C. No comments were received, or discussions occurred.

Page 5: Lines 92-114 Debby provided an overview for sections D and E. No comments were received, or discussions occurred.

Page 6: Lines 115-138 No comments were received, or discussions occurred.

Page 7: Lines 139-160 No comments were received, or discussions occurred.

Page 8: Lines 161-183 No comments were received, or discussions occurred.

Page 9: Lines 184-200 Scott Johnson inquired about seems like seven is a low number. If you look at the rubric and go down to the next page where we have the weight of three at the bottom row. You get three times two under scale ups, is that six points? Debby, yes, you're right. Scott continued, the amount of data on the test parameters, both of those together you hope they get a reasonable amount of flow, and a reasonable number of tests. What that means is they don't have to have anything on data source, test result, data quality, tested system documentation, or knowledge base. I'm not a manufacturer or all that, it seems like based on the rubric you want them to do the testing like you asked; at least 200 gpd and not exceeding 5,000 gpd and have the proper tests. It appears for those two it more than exceeds seven. This is Ed Barranco, you may want to have a minimum number for each category. Maybe just come up with numbers that are a little bit larger. Debby Tipton indicated that is one way to address that and in addition to this, also calibrating the values to have minimum scores for each category. This would provide balance to applicants that may be very strong on maybe one or two categories and then have nothing in any of the other categories. Thank you, that's a very good point and for those suggestions.

Page 10, 11, 12, 13, 14, and 15: Lines 201-254 (Table 1, 2, and 3). Debby Tipton provided an overview for sections and the different tables. Eb Roeder added some back ground on the origin of the tables. No comments were received, or discussions occurred.

Ron Davenport suggested tabling the issue until it can be revised/edited and look at it next month. Scott Johnson made a motion to table Issue 19-08 and the motion was seconded by Elias Christ. The motion was unanimously approved, motion passed, none opposed, issue tabled.

B) Performance Based System Standards TRAP Issue 19-12 formerly Issue 7-23 (recording begin 2:40:06)

Ed Roeder lead the overview with TRAP Issue 19-12. He started with the line 1-74, which are currently struck and *should not be struck out*. The only exception to this is the three lines 38-40, these lines should be stricken, as that is a change from the previous submission. Issue 19-12 was an issue brought up a long time ago (7-23) some 12 years ago. Part of the issue was the current definition of "performance" in the code, included seven- and 30-day averages, which has no meaningful counterpart in how sampling should be done on onsite systems. It replaces that with a percentage removal, which is of more interest. That issue was discussed over several years, which was 2007 through 2010 and accepted by TRAP. The only change he was proposing was something that the statute had changed in 2013. The Florida Keys statute included a similar concept, if you have a percent reduction that should be as good or an equivalent to meeting a milligram per liter effluent standards. Statute set for the Florida Keys, indicates a treatment system that meets 70% reduction for nitrogen, would be deemed to comply with 10 milligrams per liter standards. See the highlight on line 105 change from 62% to 70%. Ed Barranco mentioned this issue was approved by TRAP and did not make it to rule making over the years.

Ron Davenport confirmed all the strike through passed from 135. Eb, yes, that was the current language and that was struck through from 135 to the end. 1-74 should not be struck through, with the only exception being line 37-40 (which should be stricken). Place a period after the word "located" on line 37, then strike the remainder of line 37 through line 40 and then line 41-74 should be unstricken.

Ed Barranco, the only change to the table is on line 105 where we strike 62 and add 70. New language

after the table is placement for the chlorine requirement. Pages five through 11 is stricken. Scott Johnson, line 92 bottom of page 3. We have columns for pollutant and all the different base lines and advancing from Florida Keys from left to right. We have eight numbers at line 92 but have seven columns. Eb Roeder, right next to the base line, look at the column heading, it talks about domestic advanced sewage waste water waste treatment range effluent, so that is the concatenation of domestic sewage waste range and advanced waste water treatment effluent standards. The very right most column would be the advanced waste water treatment.

Ron asked for a motion to accept as presented. Kriss Kaye made a motion to accept as amended and Elias Christ seconded the motion. The motion was unanimously approved, motion passed, none opposed, issue passed.

4. New Business (none)

5. Other items of interest to the TRAP

a) Exempting repairs from the last sentence in sub-section 64E-6.015(6)(c)2, FAC, if they meet current rule sizing, presented by Denworth Cameron.

Denworth Cameron was recognized to present his item of interest to TRAP. His presentation of the issue focused on the repair part of the rule and regarding drainfield sized pre-1983 systems repairs, this section is being applied across the board regardless. His proposal is to add to the last sentence of the 64E-6.015(6)(c)(2) section, that it cannot be smaller than the existing system unless it complies with the current rule. He indicated adding this language would make it clear this section of the rule should not be applied to a post 1983 system.

David Hammonds commented, by referring to sub section 64E-6.015(10) the amount of drainfield installed during the repair should not be less than the amount the system had prior to the repair. That includes all sections of this rule and not just pre 1983. This language, you are speaking about, was added in 1995. At that time, we were seeing failures and they were wanting to repair with systems that were less and had smaller drainfields. The thought process was that you are always repairing a system, by adding drainfield to the system during repairs. At some point it was determined, if the applicant wanted to install a brand-new system, meeting all the new rules, they could install a system meeting that. Therefore, either you repair it to the repair standards, or you install it to new system standards, and this is the applicant's choice to make. The rule is being interpreted correctly it is pre 1983 and yes, it was put in that section specifically. However, it was also placed in a different subsection of the rule (same time and same date) to apply to other post 1983 installations and it is also being interpreted correctly. I am sure when we do a rule rewrite for the repair section, this can be made a little bit clearer. The interpretations came out several years ago, regarding if you want to install a new system to all new system standards, then that would be perfectly acceptable.

Denworth Cameron followed up with, so if you have a big system you can opt to install a whole new system and make it smaller, but you can't replace a system and make it smaller because of a change to site conditions. The whole idea behind this proposal is to lesson the financial burden homeowners must face. I come across sites where the previous site evaluator called the soils wrong. They sized it for moderately limited soil, and I find the soils only slightly limited. Now the Department says it can't be smaller, even though the site conditions exist to make it smaller and they turn to this section of the rule (as explanation). My proposal is, if it meets the current sizing for a new system and it meet that (new system) criteria, then why not just add this exception to the repair rule. Why would we enforce a larger system that's being replaced? Why require a system repair to be larger than a new system would be?

David Hammonds, commented, one of the reasons was we found many people with larger systems that keep failing. The thought process at that time, was if you failed with a larger system than what's required, then why would you allow a repair with a smaller system?

Denworth Cameron commented, that system may be failing due to hydraulic overload. If it keeps failing, then that rule in section (b) it does address what to do when the system is too small.

David Hammonds, well, the rule is being correctly interpreted now and we have your comments regarding what you would like to do. I am glad you had some clarification points. I wanted to respond, to what this information originally was, so you knew how it got there, and how it is interpreted.

Ed Barranco, just so I know I understand, you went to a site that was a 600 sq./ft drainfield that has failed, which was incorrectly sized on moderately limited soils, which is what got it to be 600 sq./ft. The soils there are slightly limited soils, which means if you use new sizing one it, it might get it to 400 sq./ft, but you have 600 incorrectly or not that has failed.

Denworth Cameron, yes, but the system is 16 years old. They fail eventually.

Ed Barranco, they have 600 sq./ft system failure and they are going to replace it (homeowner) with 400 sq./ft because it is possibly less expensive to the homeowner. They've already had a 600 sq./ft failure. This is hard to wrap my head around.

Denworth Cameron, doesn't the department have protocol to protect consumers from financial burden? In some cases, it can save like \$2,000.

Ed Barranco, we have your proposal and we will study it as much as we can. We will let you know what we will be doing with it.

Elias Christ, so the situation I came across, is a little different than Denworth, but you go out and do a repair evaluation it is conceivable, I had this conversation as a DOH employee and with other inspectors, if you have a house built in the 1970's and there is more than one drainfield repaired there. The first drainfield was left in place, because they are allowed to add on, and both drainfields are left intact now we are perpetually adding on. Which one is functioning? Are they both taking water? It gets to a point with a pre-1983 home, with three bedrooms, having to put 500-600 feet of drainfield back because there's been a couple repairs over the years, because the old ones weren't removed. These are tricky situations. Just wanted to throw this out there for additional thoughts because those situations exist.

Roxanne Groover, responded. They can make this a new system, if they want to move it to the front yard, would be the financial encumbrance to the homeowner verses keeping it in the back yard at the larger size? Cannot they not meet the new construction code?

Denworth Cameron, no, when you go to new construction, you have the additional tank installation costs with the drainfield.

Roxanne confirmed it is not for any other reason (example, setbacks) and if you must go to new it is just because of the related tank costs.

Denworth Cameron, my whole basis is to lessen the financial burden and so they will more likely apply for the permit. People all the time try to see if they can get around pulling a permit, because of all the red tape the county put them through. I am trying to lessen that and trying to paint a better picture of the Department. He feels the logic and basis of the rule made 20 years ago, the department is still holding on to it even if the basis or logic doesn't make sense anymore.

David Hammonds commented, as he has been told by several contractors, much of the cost of the system is based on the drainfield, even with the cost of a new tank, at some point there is little or any additional cost. It would be individual. Just to make a blanket statement that somebody is in financial hardship, again we still must consider public health implications. The applicant is provided with all the possible options available, in case they have a little extra money to spend, if they can afford it.

Denworth Cameron, I don't see how meeting new rule requirements can amount amount to a public health concern.

David Hammonds, the repair wouldn't be meeting new rule requirements. As you stated it was regarding drainfield size requirements. If I understand your statement correctly, you said the system only met all new drainfield size requirements and not all new system requirements. If there is not a 24-inch separation (from the water table) then it is not the same treatment. There's a difference.

Denworth Cameron, in the instances that I have had it never a matter of can we meet the setbacks and separation. We're getting it into better conditions. Why can't we use the current rule sizing and make a smaller drainfield and making the costs less, saving possibly a couple thousand bucks.

David Hammonds, it may need more consideration of all the possible parameters as opposed to just being able to do it. One must be able to properly evaluate the reason or reasons for the failure. In my experience, there is generally more than one reason leading to the system failure. We don't know if it will be able to be done this way, at the point we're just discussing.

Denworth Cameron, it's my understanding this rule was put in place, because the thought was if this drainfield sized failed, why would we go put in a smaller drainfield. In situations where drainfield sizes being too small is a cause of failure due to hydraulic overload, that is address in another section of the rule. If it's addressed there, what's the concern with making something meeting current rule sizing, just because current sizing is smaller.

Roxanne Groover, if it can meet current drainfield sizing, then it needs to meet current everything else. You can't just pick a part of the code you want to go with. Current tank sizing, current setbacks, everything else etc. I agree with David, there are a lot of different parameters and you can't just pick out a certain portion of it. It's got to meet current everything.

Denworth Cameron, I agree. If you look at my proposal, I believe it does incorporate those parts of the rule like system designs and sizes.

Roxanne Groover, not just drainfield it has got to meet current everything. That's current, soils, setbacks, if your going to use current drainfield then you must use current everything. Ron, you're the Chair and I don't think we can approve it as it hasn't been properly noticed. Maybe give Denworth an opportunity to go in and make some changes for the meeting next month.

Ron Davenport, Denworth are you good with that?

Denworth Cameron, yes, I'll keep working at it.

b) Tank Issue: Roxanne Groover was recognized to share a tank issue.

Roxanne Groover shared a complaint she received during consulting visits and inspections, DOH inspectors while shooting elevations there is a challenge. The code requires a fall of 1"-3" but some inspectors are challenging the tank design standards, when they are not met exactly. If it is not meeting the tanks design standards it is getting failed, why are we getting that specific verses it meeting the fall requirement of 1"-3". I just need to know where we stand as TRAP committee. Is this something that can be addressed by procedurally or is this a rule issue?

Ed Barranco, what more do you know about these tanks? We do issue tank approvals. The approval comes with the design that show what the number of inches of fall were approved. Are these tanks designed to have inlet and outlet created in the field and that's causing the problem or what?

Roxanne Groover, I am thinking its always been if the fall is between 1-3", that no body has looked at the specific design standard and accepted it. Every tank is not being look at in that much detail.

There are many variations based on where and how exact the inspector is measuring it.

Eb Roeder, commented this came up recently and he was not sure how wide spread it is. The 1-3" of fall is the tank manufacturing standard and expected to be met. The other standard relates to levelness. The level standard requires it to be within one half inch and cannot tilt upwards. A tank with a 3" drop and a levelness of 2 5/8" would look like an uphill relation.

Ed Barranco, that means there are two rule requirements in play. This is something we can look at Roxanne and get back to you.

Roxanne Groover, ok and I have some measurements I can share with you.

Ed Barranco, thanks you. We will look at it some more.

6. PUBLIC COMMENT

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

Kriss Kaye made a motion to adjourn and Ron Davenport move it. Meeting Adjourned at 3:48 p.m.