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These issues are being considered for inclusion into chapter 64E-6, FAC. They are currently on the agenda for the upcoming TRAP meeting. Check the TRAP Meeting Agenda to verify that an issue has not been added or removed. The issue sheets are generally accurate but may contain errors and omissions.

Call Gerald Briggs or Dale Holcomb at 850-245-4070 with questions regarding the rule proposals.

Issue Number: 05-03
Subject: Wekiva Study Area
Date New: 4/20/2005
Date Initially Heard by TRAP: 5/25/2005
Date Tabled by TRAP: 8/21/2007
Date Initially Approved by TRAP: 8/21/2007
Date Heard by Variance Committee: 11/1/2007
Date of TRAP Final Recommendation:
TRAP Final Recommendation:
Ready for Inclusion in Rule: NO

Issue Development Notes:

5/25/2005 TRAP Approved with CBOD and TSS limited to 10 and some typos fixed.
On to Variance Committee
5/26/2005 Wekiva Commission asked for public meetings and to present info at
September commission meeting.
9/1/2005 Variance sent comments back to TRAP.
9/15/05 TRAP withdrew initial approval and asked for more information to review.
9/15/05 Modified language to address some comments from the public.
9/21/05 Separated 64E-6.001 general section cleanup to its own issue 05-04.
11/2/05 new draft distributed. Tabled for industry report.
2/15/2006 TRAP recommended the following: "If funding can be available to make
repairs, malfunctioning systems in the Wekiva Study Area shall be upgraded to
meet new standards" Ellen's group will study issue. TRAP will send a letter to
the legislature on the matter.
8/21/07 TRAP approved septage land application restriction but tabled remainder
waiting for DEP to finish Phase II study clarifying non-OSTDS contributions to
total nitrogen load to WSA.
10/4/07 Variance committee commented on entire Wekiva rule proposal (not just
septage paragraph): Real Estate Industry - No; Home Building Industry - Deny.
This is a slip toward doing this state wide! Not sufficient testing data;
County Health Department - OK; State Health Office - Ok; Unsigned comment -
Disagree.
10/16/07 The State Surgeon General instructed the Bureau to proceed with
rulemaking.
10/23/07 Incorporated RRAC comments other clarification.
11/1/07 Variance committee to comment on Wekiva septage proposal alone:
Engineering-ok, State Health Office-Agree, CHD-Agreed, DEP-Prohibit Land
Application in WSA as DEP rules already do, Septic Tank industry - I understand
the reason but worry about land spreading anytime we lose another application
area. An alternative would be to have legislature pass a statute requiring
sewer plants to take septage.
5/27/08 Inserted Nitrogen Reduction Strategy Comparison information for TRAP
review.
6/5/2008 On TRAP agenda for discussion
8/8/08 On TRAP agenda for discussion
8/27/08 On TRAP agenda for discussion
2/5/09 Incorporated draft language.

64E-6.001 General

(1)through (6) No change

(7) The following standards shall apply in the Wekiva Study Area as defined in 369.316, F.S.

(a) In areas not scheduled, by an adopted local wastewater facility plan, to be served by a central sewer system by July 1, 2012, performance based treatment systems with a total nitrogen discharge limit of 10 milligrams per liter at the outlet of the treatment receptacle shall be required for new systems, modifications, and repairs. No increase in the authorized sewage flow allowances of 381.0065(4)(a), (b), and (g) shall allowed for use of these systems.

(b) In areas not scheduled, by an adopted local wastewater facility plan, to be served by a central sewer system by July 1, 2012, prior to completion of any real estate transaction for property with an onsite sewage treatment and disposal system that does not meet the above referenced standard, the seller must apply for and receive a construction permit to upgrade the system to a performance based treatment system with a total nitrogen discharge limit of 10 milligrams per liter at the outlet of the treatment receptacle. The system must be installed and receive final approval from the department within 18 months of the issue date of the permit.

(c) Land application of septage shall not be allowed.

(7) renumbered as (8) No change

Specific Authority ~~381.0011(4), (13)~~, 381.0065(3)(a), 489.553(3), 489.557(1) FS. Law Implemented 381.0065, 381.0067, 386.041, 489.553, FS. History—New 12-22-82, Amended 2-5-85, Formerly 10-6.41, Amended 3-17-92, 1-3-95, 5-14-96, 2-13-97, Formerly 10D-6.041, Amended 11-19-97, 2-3-98, 3-22-00, 9-5-00, 05-24-04, 11-26-06, _____.

Issue Number: 07-23
Subject: Performance-Based Systems-Standards
Date New: 8/3/2007
Date Initially Heard by TRAP: 8/21/2007
Date Tabled by TRAP: 8/21/2007
Date Initially Approved by TRAP:
Date Heard by Variance Committee:
Date of TRAP Final Recommendation:
TRAP Final Recommendation:
Ready for Inclusion in Rule: NO

Issue Development Notes:

8/21/07 TRAP tabled for Damann Anderson's comments to be considered.
2/8/08 Eberhard discussed with Damann and made appropriate changes to definition 025(3). Incorporated raw sewage data based on discussion with Ed Barranco. Changed the "credit" for soil-based nutrient treatment, added a column for raw sewage, made the baseline system (septic tank effluent) numbers so that they match closely with the numbers in the drainfield size reduction section, and changed the definition of high-strength wastewater (higher than domestic ranges).
2/3/09 Eberhard made several changes to the proposal, Gerald reviewed and did clean-up.

The proposal replaces treatment standards for 7-day and 30-day averages with a percent removal performance standard. 7-day and 30-day averages are not meaningful in current practice. Percent removal addresses variability in influent concentrations. The standards are reformatted in a table for ease of reading. ATU standards are defined. Single sample standards are given as a multiple of annual averages. Septic tank effluent standards are now consistent with 64E-6.002(15)(c)(domestic sewage strength). Baseline treatment standards are provided for all pollutants. Treatment standards are adjusted for soil-based treatment.

64E-6.025 Definitions

Due to extensive revision, strike entire section and add the following:

Definitions in Chapter 64E-6, Parts I and II, are also applicable to Chapter 64E-6, Part IV.

- (1) Bottom infiltrative surface - the vertical projection of the bottom surface of the drainfield that is no lower in elevation than 30 inches below grade.
 - (2) Composite sample – a defined mixture of grab samples of wastewater or effluent taken in proportion to either time or flow, to minimize the effect of the variability of the individual sample.
 - (3) Effluent – treated sewage at the point of discharge to the drainfield or disposal system. Where the site specific application proposes to use soil as part of the treatment system, effluent refers to the mixture of soil water, effluent and shallow groundwater recovered from the monitoring points and treatment concentration standards shall be decreased by 50% for cBOD₅, TSS, TN, and TP, and by 90% for fecal coliform, and percent removal standards of table IX shall be correspondingly adjusted.
 - (4) Failure - in addition to 64E-6.002(23), shall include if sampling determines that an individual sample exceeds the applicable performance standards, unless the maintenance entity performs and documents maintenance, and a second individual sample is taken within 30 days of the first individual sample and meets the applicable individual performance standard.
 - (5) Grab sample - a sample which is taken from wastewater or effluent over a period of time not to exceed fifteen minutes.
 - (6) Effective drainfield depth - the vertical distance from the bottom of the drainfield to the invert of the distribution pipe.
 - (7) High strength wastewater - Wastewater that exceeds the domestic sewage waste range given in Table IX for at least one pollutant
 - (8) Innovative System – as defined by s. 381.0065(2)(g), F.S.
 - (9) Performance-based treatment system - a specialized onsite sewage treatment and disposal system designed by a professional engineer with a background in wastewater engineering, licensed in the state of Florida, using appropriate application of sound engineering principles to achieve specified levels of CBOD₅(carbonaceous biochemical oxygen demand), TSS(total suspended solids), TN(total nitrogen), TP(total phosphorus), and fecal coliform found in domestic sewage waste, to a specific and measurable established performance standard. This term also includes innovative systems.
 - (10) Performance-Based System Maintenance Entity - any person or business entity which has been issued a written permit by the county health department and has been authorized by the design engineer or manufacturer of all treatment components used in the performance-based treatment system and provides operation and maintenance services associated with performance-based treatment system.
 - (11) Sidewall infiltrative surfaces - the horizontal projection of the drainfield measured from the invert of the drainfield distribution pipe to the bottom infiltrative surface, or to 30 inches below finished grade, whichever is less.
 - (12) Total drainfield depth - the vertical distance from the bottom of the drainfield to the top of the drainfield.
 - (13) Treatment performance standards -
 - (a) Performance standards for performance-based treatment system consist of three values. Compliance shall be achieved at least for two of the three:
 1. Annual average concentration is the arithmetic mean of the results of all effluent samples taken within the previous 365 days, expressed as a concentration.
 2. Individual sample - result of analysis of one effluent sample, whether grab sample or composite sample, expressed as a concentration.
 3. Percent removal – annual average removal of a pollutant from the discharge of the treatment system compared to the influent from the establishment. The influent stems from a septic tank or similar treatment compartment and the effluent is discharged to a disposal system $\text{percent removal} = (1 - \text{effluent concentration} / \text{influent concentration}) * 100$
 - (b) Treatment performance standards are established for five pollutants.
 1. Carbonaceous biochemical oxygen demand after five days(CBOD₅), measured in mg oxygen per liter
 2. Total suspended solids(TSS), measured in mg per liter
 3. Total nitrogen(TN), the sum of nitrite, nitrate and total Kjeldahl nitrogen, measured in mg nitrogen per liter
 4. Total phosphorus(TP), measured in mg phosphorus per liter
 5. Fecal coliform, measured in colony forming units(cfu) or most probable number(MPN) per 100 mL
 - Numerical values for several levels of common treatment performance standards for the five pollutants are defined in table IX. The values determined from samples in the field shall be equal to or better than the treatment standards listed. For concentrations, better means lower, for percent removal, better means higher.
 - (14) Wastewater strength - the sum of the CBOD₅ and TSS concentrations in the effluent.
- Specific Authority 381.0011(4),(13), 381.0065(3)(a), FS. Law Implemented 381.0065, 381.0067, 386.041, FS. History—New 2-3-98, Amended 3-22-00, 06-18-03, 11-26-06, __.

TABLE IX
TREATMENT STANDARDS

POLLUTANT	Domestic Sewage Waste Range	Baseline Septic Tank Effluent Standards	Baseline Treatment Standard 24" below bottom infiltrative surface	Aerobic Treatment Unit Standards	Secondary Treatment Standards	Advanced Secondary Treatment Standards	Florida Keys Nutrient Reduction Standards	Advanced Wastewater Treatment Standards
CBOD ₅ annual average individual sample percent removal	300 500	150 300 not applicable	10 mg/l 20 mg/ 95	20 mg/l 60 mg/l 90	20 mg/l 60 mg/l 90	10 mg/l 30 mg/l 95	10 mg/l 30 mg/ 95	5 mg/l 10 mg/l 97
TSS annual average individual sample percent removal	200 500	100 200 not applicable	30 mg/l 100 mg/ 85	20 mg/l 60 mg/l 85	20 mg/l 60 mg/l 90	10 mg/l 30 mg/l 95	10 mg/l 30 mg/l 95	5 mg/l 10 mg/l 97
TN annual average individual sample percent removal	100 150	100 150 not applicable	70 100 30	not applicable not applicable not applicable	not applicable not applicable not applicable	20 mg/l 40 mg/l 50	10 mg/l 20 mg/l 70	3 mg/l 6 mg/l 90
TP annual average individual sample percent removal	18 25	18 25 not applicable	12 18 30	not applicable not applicable not applicable	not applicable not applicable not applicable	10 mg/l 20 mg/l 25	1 mg/l 2 mg/l 90	1 mg/l 2 mg/l 90
Fecal coliform annual average individual sample percent removal	2.0E+6 2.0E+7	2.0E+6 2.0E+7 not applicable	20 cfu/ 100 ml 200 cfu/ 100 ml 99.999	not applicable not applicable not applicable	200 cfu/ 100 ml 800 cfu/ 100 ml 99.99	200 cfu/ 100 ml 800 cfu/ 100 ml 99.99	not applicable not applicable not applicable	BDL 25 cfu/100 ml 99.9999

Footnote 1. Where chlorine is used for disinfection in a system designed to meet the advanced wastewater treatment standards for fecal coliforms, the design shall include provisions for rapid and uniform mixing; and the total chlorine residual of at least 1.0 mg/l shall be maintained at all times. The minimum acceptable contact time shall be 15 minutes at the peak hourly flow.

Footnote 2. Where chlorine is used for disinfection in a system designed to meet either the secondary treatment standard or the advanced secondary treatment standard for fecal coliforms, the design shall include provisions for rapid and uniform mixing and a total chlorine residual of at least 0.5 mg/l shall be maintained after at least 15 minutes contact time at the peak hourly flow.

Issue Number: 08-04
Subject: Retesting Tanks to 2006 Standard
Date New: 1/10/2008
Date Initially Heard by TRAP: 6/5/2008
Date Tabled by TRAP: 6/5/2008
Date Initially Approved by TRAP: 8/27/2008
Date Heard by Variance Committee: 10/2/2008
Date of TRAP Final Recommendation:
TRAP Final Recommendation:
Ready for Inclusion in Rule: NO

Issue Development Notes:

2/13/08 This issue was extracted from issue 07-34 to become a separate issue for reconsideration.

6/5/08 Added comma in 64E-6.013(1)(c)4.; did some cosmetic readability improvements in 64E-6.013(1)(c)4.a.; and added prohibition from installing non-re-approved tanks after a certain date in 64E-6.013(1)(c)4.d. TRAP TABLED for Paul to develop alternative testing language.

8/8/08 Paul has been working alternative evaluation mechanism - will present update.

8/27/08 TRAP specified that the DATE in (1)(c)4.e. be one year after the effective date. If we must specify a date certain, we will specify one at least one year after the anticipated date. TRAP passed to Variance committee.

10/1/08 Variance Committee comments: CHD-I am ok with this; ENG-new only.

Retrofit problem; SHO- Good change, puts everyone on same plane; REI- this is ok if it does not require replacement of tank that is already installed on private property. If the rule requires replacement of tank on private property then I vote no; DEP-no comment; HBI- not retroactive to existing.; STI-Brings consistency to current rule. I endorse this requirement.

64E-6.013 Construction Materials and Standards for Treatment Receptacles

(1) Onsite wastewater treatment receptacle design- The following requirements shall apply to all onsite wastewater treatment receptacles manufactured for use in Florida unless specifically exempted by other provisions of these rules:

(a) through (b) No change

(c) Design and testing of fiberglass and polyethylene treatment receptacles:

1. Vacuum testing shall be conducted in accordance with the department's policy for Test Requirements for Structural Proofing. The vacuum test shall be followed by a water-tightness test.

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

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

4. Reapproval of receptacles approved prior to November 26, 2006- It shall be the responsibility of each manufacturer to apply for reapproval of existing Fiberglass and Polyethylene receptacle designs. Receptacles shall be proof tested. If the data from previous receptacle proof testing conducted in accordance with this section show compliance with the current provisions, those data may be used in lieu of additional proof testing. The reapproval request shall list the existing State of Florida approval numbers. The state health office will review the manufacturer's files on record at the state office for verification of approval numbers and satisfactory detailed drawings. The state health office shall notify the manufacturer of deficiencies that must be corrected. If additional drawings are required, the manufacturer shall provide engineering drawings or utilize a standard drawing and dimension table format provided by the state office. Designs shall be submitted to the State of Florida, Department of Health, Bureau of Onsite Sewage Programs.

a. Reapproval shall be obtained only after the manufacturer of a specific receptacle model has submitted details of the receptacle and receptacle lid showing:

i. Proof testing results in accordance with 64E-6.013(1).

ii. Dimensions.

iii. Effective capacity in gallons.

iv. Freeboard or air space in gallons.

v. Production materials.

vi. Reinforcing materials. Drawings on file with the state health office that do not detail reinforcing must be updated by the manufacturer.

b. A series of receptacles may be approved by successful demonstration of the largest in a series of receptacles. Approval for inclusion of the receptacles to be considered in a series must be obtained from the state health office prior to testing the receptacles.

c. The manufacturer shall notify the state health office no less than ten working days prior to the receptacle proof testing. Approval shall not be granted until after successfully passing the required tests, and submitting the testing results.

d. The department will issue an approval number to the manufacturer. 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, shall be used to apply for septic tank manufacturing approval. The form can be obtained from the department.

e. Treatment receptacles not re-approved under this section shall not be installed in Florida more than one year following the effective date of this rule.

(d) through (f) No change

(2) through (12) No change

Specific Authority 381.0011(4),(13), 381.0065(3)(a), FS. Law Implemented 381.0065, FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.55, Amended 3-17-92, 1-3-95, Formerly 10D-6.055, Amended 11-19-97, 2-3-98, 3-22-00, 4-21-02, 05-24-04, 11-26-06,_____.

Issue Number: 08-09
Subject: Innovative Systems-Test Data Required
Date New: 4/21/2008
Date Initially Heard by TRAP:
Date Tabled by TRAP:
Date Initially Approved by TRAP:
Date Heard by Variance Committee:
Date of TRAP Final Recommendation:
TRAP Final Recommendation:
Ready for Inclusion in Rule: NO

Issue Development Notes:

5/27/08 Gerald asked to remove it to study the language.
2/3/09 Eberhard edited and Gerald reviewed.

64E-6.004 Application for System Construction Permit

(1) through (7) No change

~~(8) Innovative Systems shall be permitted in accordance with Part IV of this Chapter. —or new product approval for onsite sewage treatment and disposal systems shall be initiated by submittal of an application for permit using Form DH 3143, Jan 94, hereby incorporated by reference. DOH county health departments are authorized to issue installation permits upon receipt of the temporary permit. Form DH 3144, Jan 94, and Form DH 3145, Jan 94, hereby incorporated by reference, shall be used to record information that describes notification requirements between the temporary permit applicant, the DOH county health department, and the State Health Office. These forms are to be processed by the DOH county health departments.~~

Specific Authority 381.0011(4),(13), 381.0065(3)(a), 489.553(3) FS. Law Implemented 381.0065, 489.553, FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.44, Amended 3-17-92, 1-3-95, 5-14-96, 2-13-97, Formerly 10D-6.044, Amended 11-19-97, 3-22-00, 11-26-06.

64E-6.026 Applications for Innovative system permits and System Construction Permits

~~(1) Applications for innovative system permits —The manufacturer or their authorized agent shall apply Applications for an innovative system permits shall be made using form DH 3143, 01/94, Innovative Onsite Sewage Treatment and disposal System Temporary Permit Application, herein incorporated by reference. The application and all supporting information shall be signed, dated and sealed by an engineer, licensed in the State of Florida, accompanied by the appropriate fee and submitted to the Department's Bureau of Onsite Sewage Programs. Except as provided for in subsection 64E-6.028(3), FAC, alternative drainfield materials and designs shall not be approved which would result in a reduction in drainfield size using the mineral aggregate drainfield system as described in section Rule 64E-6.014, FAC, and the total surface area of soil at the bottom of the drainfield as the criteria for drainfield sizing comparisons. Applications shall include:~~

~~(a) A monitoring protocol designed to validate that the performance of the system in Florida over a minimum of one year and with data from a minimum of 30 monitoring events at a minimum of five systems. Each site installation may provide only one monitoring event per 30-day period will perform to the engineer's design specifications.~~

~~(b) Compelling evidence that the system will function properly and reliably to meet the requirements of this chapter and section 381.0065, FS. Such compelling evidence shall include the testing protocol and results on performance and reliability from tests meeting all of the following conditions:~~

~~1. For tests conducted in Florida, none of the effluent from the testing shall enter the environment until it has been treated by a system permitted under chapter 403, FS, or by a non-innovative system permitted under chapter 381.0065 FS.~~

~~2. The results must be from full-scale testing with an average measured daily sewage flow of at least 200 gallons per day.~~

~~3. Results shall include measured influent and performance conditions in at least ten separate weeks over at least five months.~~

~~4. The tests must be conducted under one or more of the following conditions from a third-party testing organization approved through the NSF Environmental Technology Verification Program:~~

a.1. Testing of the innovative systems in other states with similar soils and climates, by a third party testing organization independent of the designer, engineer and manufacturer, such as NSF and entities performing such testing for NSF, the United States Environmental Protection Agency's national onsite demonstration projects, or state agencies, outside of Florida, tasked with onsite sewage system evaluation.

b.2. Testing in Florida where the system-side stream testing is part of where effluent is discharged into a treatment system regulated and monitored pursuant to Chapter 403, FS, certified by an engineer, licensed in Florida.

c.3. laboratory testing-Testing of the system in Florida as part of Department-supervised research, certified by an engineer, licensed in Florida.

(c) An operation and maintenance manual, including a replacement part list and instructions on how to detect, maintain, and repair a malfunctioning system.

(d) Design and installation manual, including system design criteria, design performance levels, and transferability of obtained results to different flows and conditions.

(e) a five-year warranty by the manufacturer to the innovative system owner for providing engineer and a certified installer who will provide engineering services, contractor equipment, material and labor necessary to secure permits and modify the system or repair the system with a department-approved non-innovative system in case of failure.

(2) Application for innovative system construction permits. DOH county health departments are authorized to issue system construction permits upon receipt of the innovative system permit and application for a system construction permit. In addition to the requirements of subsection 64E-6.026(3), Form DH 3144, 1/94, and Form DH 3145, 1/94, Innovative Onsite Sewage Treatment and Disposal System Review Information Form, hereby incorporated by reference, shall be used to record information that describes notification requirements between the innovative system permit applicant, the DOH county health department, and the State Health Office. These forms are to be processed by the DOH county health departments.

(2) and (3) renumbered as (3) and (4) No change

Specific 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 06-18-03, 11-26-06,_____.

Issue Number: 08-10
Subject: When Engineer or Master Contractors are Required
Date New: 5/20/2008
Date Initially Heard by TRAP: 6/5/2008
Date Tabled by TRAP: 8/27/2008
Date Initially Approved by TRAP:
Date Heard by Variance Committee:
Date of TRAP Final Recommendation:
TRAP Final Recommendation:
Ready for Inclusion in Rule: NO

Issue Development Notes:
6/5/08 TRAP Tabled this issue.
8/27/08 TRAP Tabled for FOWA to review issue.

64E-6.003 Permits

(1) No change

(2) System Inspection - Before covering with earth and before placing a system into service, a person installing or constructing any portion of an onsite sewage treatment and disposal system shall notify the county health department of the completion of the construction activities and shall have the system inspected by the department for compliance with the requirements of this Chapter, except as noted in subsection 64E-6.003(3) for repair installations.

(a) If the system construction is approved after an inspection by the DOH county health department, the department shall issue a "Construction Approval" notice to the installer.

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

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

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

2. If the system plans and specifications were prepared by a master septic tank contractor, the DOH county health department shall require the master septic tank contractor to certify that the installed system complies with the approved plans and installation requirements. Single family residences are excluded from this requirement, however, all changes to the master septic tank contractor's specifications shall be approved by the master septic tank contractor through permit amendment prior to the system installation inspection.

~~3.2.~~ If additional site visits after the construction approval inspection are necessary to establish the compliance of the building construction and lot grading, or to establish the compliance with any provision of this Chapter, a reinspection fee shall be charged to the permit applicant for each inspection of the building and site leading to the final installation approval.

(d) through (e) No change

(3) through (6) No change

Specific Authority 154.06(1), 381.0011(4), (13), 381.0065(3)(a), 489.553(3), 489.557(1) FS. Law Implemented 381.0012, 381.0025, 381.0065, 381.0067, 386.041 FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.43, Amended 3-17-92, 1-3-95, 5-14-96, 2-13-97, Formerly 10D-6.043, Amended 3-22-00, 4-21-02, 05-24-04, 11-26-06,_____.

64E-6.004 Application for System Construction Permit

(1) through (2) No change

(3) The suitability of a lot, property, subdivision or building for the use of an onsite sewage treatment and disposal system shall be determined from an evaluation of lot size, anticipated sewage flow into the proposed system, the anticipated sewage waste strength, soil and water table conditions, soil drainage and site topography and other related criteria. Necessary site investigations and tests shall be performed at the expense of the owner by either an engineer with soils training who is licensed in the State of Florida pursuant to Chapter 471, F.S. , by department personnel, registered septic tank contractors, master septic tank contractors, and persons certified under s. 381.0101, F.S. Registered septic tank contractors shall perform site evaluations for system repairs only. When determining that the necessary site investigations and tests be performed by an engineer licensed in the State of Florida, the county health department must consider the criteria listed in subsection 64E-6.004(4). Where permitted by rule, if the applicant chooses to have plans prepared by a master septic tank contractor rather than an engineer, the department shall not require the site investigations and tests to be performed by an engineer. Results of site investigations shall be entered on, or attached to, the construction permit application form for consideration by the county health department. The application shall also include the following data:

(a) through (f) No change

(4) ~~All plans and forms submitted by a licensed engineer shall be dated, signed and sealed. Except as provided for in subsection 64E-6.003(2), the DOH county health department shall require the design engineer to certify that the installed system complies with the approved design and installation requirements.~~ The Under the following circumstances, the DOH county health department shall require for review and approval, the submission of detailed system construction plans under the circumstances described herein.

(a) Under the circumstances listed in 1. through 4. below, the plans shall be prepared by either an engineer who is licensed in the State of Florida or a master septic tank contractor registered under section 64E-6.020. Under the circumstances listed in 5. through 11. below, the plans shall be prepared by an engineer who is licensed in the State of Florida.:

1.(a) Systems serving establishments with proposed domestic sewage flow rates of 2500 or more gallons per day.

2. ~~(b)~~ Systems serving establishments with proposed commercial sewage flow rates of 1000 or more gallons per day.

3. ~~(e)~~ Systems where the total required drainfield area is 1500 square feet or greater.

4. All drip irrigation systems.

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

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

7. ~~(f)~~ All performance based treatment systems.

8. ~~(g)~~ All innovative systems.

9. ~~(h)~~ All sites where the seasonal high water table has or will be altered by physical or mechanical means.

10. ~~(i)~~ All sites requiring engineer designs as a condition of a variance or waiver approval.

11. Retaining walls required in section 64E-6.009.

~~(j) All drip irrigation systems.~~

(b) All plans and forms submitted by a licensed engineer shall be dated, signed and sealed.

(c) All plans and forms submitted by a master septic tank contractor shall be dated, signed and include the contractor's registration number.

(5) through (8) No change

Specific Authority 381.0011(4),(13), 381.0065(3)(a), 489.553(3) FS. Law Implemented 381.0065, 489.553, FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.44, Amended 3-17-92, 1-3-95, 5-14-96, 2-13-97, Formerly 10D-6.044, Amended 11-19-97, 3-22-00, 11-26-06, ____.

64E-6.009 Alternative Systems

When approved by the DOH county health department, alternative systems may, at the discretion of the applicant, be utilized in circumstances where standard subsurface systems are not suitable or where alternative systems are more feasible. Unless otherwise noted, all rules pertaining to siting, construction, and maintenance of standard subsurface systems shall apply to alternative systems. In addition, the DOH county health department may, using the criteria in subsection 64E-6.004(4), F.A.C., require the submission of plans prepared by an engineer licensed in the State of Florida or a master septic tank contractor, prior to considering the use of any alternative system. ~~The DOH county health department shall require an engineer licensed in the state of Florida to design a system having a total absorption area greater than 1000 square feet and shall require the design engineer to certify that the installed system complies with the approved design and installation requirements.~~

(1) through (4) No change

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

(a) Drip irrigation systems receiving effluent from an approved aerobic treatment unit- shall meet the following requirements:

1. Drip irrigation systems shall be designed by either an engineer licensed in the state of Florida or a master septic tank contractor.

2. through 23. No change

(b) No change

(6) through (7) No change

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

(9) through (10) No change

Specific Authority 381.0011(4),(13), 381.0065(3)(a), FS. Law Implemented 381.0065, FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.49, Amended 3-17-92, 1-3-95, Formerly 10D-6.049, Amended 11-19-97, 2-3-98, 3-22-00, 4-21-02, 06-18-03, 11-26-06, ____.

64E-6.012 Standards for the Construction, Operation, and Maintenance of Aerobic Treatment Units

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

(1) No change

(2) The following additional requirements shall also apply to the construction, design, and operation of aerobic treatment units treating 1500 gallons per day or less:

(a) through (d) No change

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

**TABLE IV
AEROBIC SYSTEMS
PLANT SIZING**

RESIDENTIAL: Number of Bedrooms	Building Area in square feet gallons per day	Minimum Required Treatment Capacity
1 or 2	Up to 1200	400
3	1201-2250	500
4	2251-3300	600

For each additional bedroom or each additional 750 square feet of building area, or fraction thereof, treatment capacity shall be increased by 100 gallons.

COMMERCIAL: Estimated Sewage Flow in gallons per day	Minimum Required Treatment Capacity in gallons per day
0-400.....	400
401-500.....	500
501-600.....	600
601-700.....	700
701-750.....	750
751-800.....	800
801-1000.....	1000
1001-1200.....	1200
1201-1500.....	1500

Footnotes to Table IV

1. No change

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

(f) through (n) No change

(3) through (5) No change

Specific Authority 154.06(1), 381.0011(4), (13), 381.0065(3)(a), 489.553(3), FS. Law Implemented 381.0065, Part I 386, FS. History—New 3-17-92, Amended 1-3-95, Formerly 10D-6.0541, Amended 11-19-97, 4-21-02, 06-18-03, 11-26-06, .

64E-6.014 Construction Standards for Drainfield Systems

(1) through (2) No change

(3) Low-Pressure dosing - where the total required area of drainfield is greater than 1000 square feet or where the applicant proposes to use low-pressure dosing, an automatic dosing device discharging into a low pressure distribution network consisting of 2 inch or smaller diameter schedule 40 PVC or equal pipe with ½ inch or smaller diameter drilled holes shall be used All piping shall use solvent welded connections or equal throughout to prevent dislocation of connections under pressure. The network shall be designed for equal distribution of effluent. For the purposes of this section, equal distribution shall mean that the flow from the least effective hole in the network shall deliver no less than 75% of the flow from the most effective hole. The selected pump capacity (as measured in Gallons Per Minute) versus total dynamic head shall be indicated on a pump curve and shall be shown by calculation to achieve an effluent velocity through the network of at least 2 ft per second to the first exit hole on each lateral. Each line of the pressure network shall individually connect to a pressure manifold and be sealed on their distal ends and shall not be looped with other lines regardless of whether the drainfield is a bed or a trench or whether it is in a mound, filled subsurface installation. Plans and equipment specifications for low-pressure dosing systems shall be approved by the department prior to construction or installation.

(a) through (d) No change

(e) The distribution network ~~for drainfields having an absorption area less than 1500 square feet~~ shall be designed by a Florida licensed professional engineer or a master septic tank contractor. ~~The network for drainfields having an absorption area of 1500 square feet or larger shall be designed by a Florida licensed professional engineer.~~

(f) No change

(4) through (6) No change

Specific Authority 381.0011(4), (13), 381.0065(3)(a), FS. Law Implemented 381.0065, FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.56, Amended 3-17-92, 1-3-95, Formerly 10D-6.056, Amended 2-3-98, 3-22-00, 05-24-04, 11-26-06, .

64E-6.015 Permitting and Construction of Repairs

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

(1) No change

(2) Site evaluations necessary to obtain the above referenced information shall be conducted at the expense of the owner or lessee by ~~department personnel, by an engineer who is licensed in the State of Florida, or by other~~ qualified persons ~~as~~ per subsection 64E-6.004(3). Site specific information may be obtained by the applicant through examination of department records of permits previously issued for the site.

(3) through (12) No change

Specific Authority 381.0011(4), (13), 381.0065(3)(a), FS. Law Implemented 381.0012, 381.0025, 381.0061, 381.0065, 381.0067, 386.041, FS. History—New 3-17-92, Amended 1-3-95, 2-13-97, Formerly 10D-6.0571, Amended 2-3-98, 3-22-00, 05-24-04 11-26-06, .

Issue Number: 08-12
Subject: Drainfield Loading Rates
Date New: 5/22/2008
Date Initially Heard by TRAP: 6/12/2008
Date Tabled by TRAP: 6/12/2008
Date Initially Approved by TRAP: 8/27/2008
Date Heard by Variance Committee: 10/2/2008
Date of TRAP Final Recommendation:
TRAP Final Recommendation:
Ready for Inclusion in Rule: NO

Issue Development Notes:

6/5/08 TRAP tabled for more information.
8/8/08 Eb incorporated changes from failure data analysis.
8/27/08 Amended and approved for variance committee.
10/2/08 Variance Committee comments: CHD-this needs to happen. I am in total support; STI-Good idea. Florida loading rates and GPD per bedroom. Also, lower than other states. I would recommend making including all soil types as these loading rates.; REI-I do not agree to lowering the loading rates and increasing the size of the drainfield. The soils in other states are totally different than Florida soils. I have not been given any scientific information about the numbers of failures for systems installed under Florida current rules. I do not agree to striking the 75% rule on unobstructed area. The rule requiring 2X unobstructed area is ridiculous. 1X is as much or more than is used in most replacements.; DEP-Just as a point of reference, FDEP rule 62-610.423 recommends a maximum loading of 2" per week for part II low rate land application reuse systems. This is approximately 0.18 gallons per square foot. Part II effluent must have had at least secondary treatment and basic disinfection; SHO-May need to look at all soils. Good idea. Need to change the way we calculate unobstructed area to allow proper construction of any drainfield type, or standard versus mound systems.; ENG-I have reviewed a document from Mark Hooks, that I have been told is the basis for this change, "Examining Failures of Onsite Sewage Treatment Systems in Florida" by Kevin M. Sherman, R Wade Varnadore, and Robert W. Forbes. I have a nine-page abstract that is so vague and ambiguous that I can not believe anyone would want to rely on it. I hope that a proper review of failed systems was done on an appropriate scale state wide, with some considerations as to ESHW, size of DF and tank, water consumption, system household abuse, age of system, maintenance and etc. I could not possibly support this recommendation with the data I have been given. I would be happy to bring this to the board and discuss further.; PUBLIC COMMENT-Rocky Rocco presented a cost issue.

6.005

(4) Suitable, unobstructed land shall be available for the installation and proper functioning of the system. ~~At least 75 percent of the unobstructed area must meet minimum setback requirements of subsections (1) and (3) above to allow for drainfield repair or system expansion.~~ The minimum unobstructed area shall:

- (a) Be at least ~~1.52~~ times as large as the drainfield absorption area required by rule. For example, if a 200 square feet drainfield is required, the total unobstructed area required, inclusive of the 200 square feet drainfield area, would be ~~400~~300 square feet. Unobstructed soil area between drain trenches shall be included in the unobstructed area calculation.
- (b) Be contiguous to the drainfield.
- (c) Be in addition to the setbacks required in subsection (1), (2), and (3) above.

6.008

**TABLE III
For Sizing of Drainfields Other Than Mounds**

U.S. DEPARTMENT OF AGRICULTURE SOIL TEXTURAL CLASSIFICATION	SOIL TEXTURE LIMITATION (PERCOLATION RATE)	MAXIMUM SEWAGE LOADING RATE TO TRENCH & BED ABSORPTION SURFACE IN GALLONS PER SQUARE FOOT PER DAY	
		TRENCH	BED
Sand; Coarse Sand not associated with a seasonal water table of less than 48 inches; and Loamy Coarse Sand	Slightly limited (Less than 2 min/inch)	1.20 <u>0.80</u>	0.80 <u>0.60</u>
Loamy Sand; Sandy Loam; Coarse Sandy Loam; Fine Sand	Slightly limited (2-4 min/inch)	0.90 <u>0.80</u>	0.70 <u>0.60</u>
Loam; Fine Sandy Loam; Silt Loam; Very Fine Sand; Very Fine Sandy Loam; Loamy Fine Sand; Loamy Very Fine Sand; Sandy clay loam	Moderately limited (5-10 min/inch)	0.65	0.35
Clay Loam; Silty Clay Loam; Sandy Clay; Silty Clay, Silt	Moderately limited (Greater than 15 min/inch but not exceeding 30 min/inch)	0.35	0.20
Clay; Organic Soils; Hardpan; Bedrock	Severely limited (Greater than 30 min/inch)	Unsatisfactory for standard subsurface system	
Coarse Sand with an estimated wet season high water table within 48 inches of the bottom of the proposed drainfield; Gravel or Fractured Rock or Oolitic Limestone	Severely limited (Less than 1 min/inch and a water table less than 4 feet below the drainfield)	Unsatisfactory for standard subsurface system	

3. When all other site conditions are favorable, horizons or strata of moderately or severely limited soil may be replaced with slightly limited soil or soil of the same texture as the satisfactory slightly limited permeable layer lying below the replaced layer. The slightly limited permeable layer below the replaced layer shall be identified within the soil profile which was

submitted as part of the permit application. The resulting soil profile must show complete removal of the moderately or severely limited soil layer being replaced and must be satisfactory to a minimum depth of 54 inches beneath the bottom surface of the proposed drainfield. The width of the replacement area shall be at least 2 feet wider and longer than the drain trench and for absorption beds shall include an area at least 2 feet wider and longer than the proposed bed. Drainfields shall be centered in the replaced area. Where at least 33 percent of the moderately limited soils at depths greater than 54 inches below the bottom of the drainfield have been removed to the depth of slightly limited soil, drainfield sizing shall be based on the following sewage loading rates. Where severely limited soils are being removed at depths greater than 54 inches below the bottom of the drainfield, 100 percent of the severely limited soils at depths greater than 54 inches shall be removed down to the depth of an underlying slightly limited soil. Maximum sewage loading rates for standard subsurface systems installed in replacement areas shall be ~~0.90~~0.80 gallons per square foot per day for trench systems and ~~0.70~~0.60 gallon per square foot per day for absorption beds in slightly limited soil textures. Where moderately limited soil materials are found beneath the proposed drainfield, and where system sizing is based on that moderately limited soil, soil replacements of less than 33% may be permitted.

4. Where coarse sand, gravel, or oolitic limestone directly underlies the drainfield area, the site shall be approved provided a minimum depth of 42 inches of the rapidly percolating soil beneath the bottom absorption surface of the drainfield and a minimum 12 inches of rapidly percolating soil contiguous to the drainfield sidewall absorption surfaces, is replaced with slightly limited soil material. Where such replacement method is utilized, the drainfield size shall be determined using a maximum sewage application rate of 0.80 gallons per square foot per day of drainfield in trenches and ~~0.70~~0.60 gallon per square foot per day for drainfield absorption beds.

64E-6.009(3)

(d) Where the soil material underlying a mound system is of a similar slightly limited textural material as that used in system construction, the mound drainfield size shall be based on estimated sewage flows as specified in 64E-6.008, F.A.C., Table I and upon the quality of fill material utilized in the mound system. When estimated sewage flows are calculated to be less than 200 gallons per day, specifications for system design shall be based on a minimum flow of 200 gallons per day. Maximum sewage loading rates for soils used in mound construction shall be in compliance with the following:

Fill Material	Maximum Sewage Loading Rate to Mound Drain Trench Bottom Surface in gallons per square foot per day	Maximum Sewage Loading Rate to Mound Absorption Bed Bottom Surface in gallons per square foot per day
Sand; Coarse Sand;	1.00 <u>0.80</u>	0.75 <u>0.60</u>
Loamy Coarse Sand		
Fine Sand	0.80	0.65 <u>0.60</u>
Sandy Loam; Coarse	0.65	0.40
Sandy Loam; Loamy Sand		

Issue Number: 08-16
Subject: Requirements for Engineer's Staff to do Site Evaluations
Date New: 6/25/2008
Date Initially Heard by TRAP: 8/27/2008
Date Tabled by TRAP:
Date Initially Approved by TRAP: 8/27/2008
Date Heard by Variance Committee: 10/2/2008
Date of TRAP Final Recommendation:
TRAP Final Recommendation:
Ready for Inclusion in Rule: NO

Issue Development Notes:

8/27/08 TRAP approved to send to variance committee.

10/2/08 Variance Committee comments: CHD-This is better but overall DOH should be the only ones performing soil evaluations; REI-this rule as stated is terrible. It sounds as if the soils evaluator would be under the engineer's control and license but someone would save money by not having to hire and pay the engineer. I do not support this change.; SHO-This is horrible; STI-I oppose this rule change. One needs to know ,ore than just soil morphology to do an adequate onsite site evaluation.; DEP-The PE should certify the person's work under their direct supervision.; ENG-I have expressed displeasure with FES regarding any compromise that infringes upon the engineering statutes, I am now on that committee and will work hard to keep anything like this from happening again.

64E-6.004 Application for System Construction Permit

(1) through (2) No change

(3) The suitability of a lot, property, subdivision or building for the use of an onsite sewage treatment and disposal system shall be determined from an evaluation of lot size, anticipated sewage flow into the proposed system, the anticipated sewage waste strength, soil and water table conditions, soil drainage and site topography and other related criteria. Necessary site investigations and tests shall be performed at the expense of the owner by either an engineer with soils training who is licensed in the State of Florida pursuant to Chapter 471, F.S. ~~;~~ by persons who have successfully completed a department-approved soils morphology course who are working under the direct responsible charge of an engineer licensed under Chapter 471, F.S.; by department personnel, registered septic tank contractors; ~~;~~ by master septic tank contractors; ~~;~~ or by ~~and~~ persons certified under s. 381.0101, F.S. Registered septic tank contractors shall perform site evaluations for system repairs only. When determining that the necessary site investigations and tests be performed by an engineer licensed in the State of Florida, the county health department must consider the criteria listed in subsection 64E-6.004(4). Results of site investigations shall be entered on, or attached to, the construction permit application form for consideration by the county health department. The application shall also include the following data:

(a) through (f) No change

(4) through (8) No change

Specific Authority 381.0011(4),(13), 381.0065(3)(a), 489.553(3) FS. Law Implemented 381.0065, 489.553, FS. History— New 12-22-82, Amended 2-5-85, Formerly 10D-6.44, Amended 3-17-92, 1-3-95, 5-14-96, 2-13-97, Formerly 10D-6.044, Amended 11-19-97, 3-22-00, 11-26-06, .

Issue Number: 08-17
Subject: Issues suggested by Mr. Scharr
Date New: 8/4/2008
Date Initially Heard by TRAP: 8/27/2008
Date Tabled by TRAP:
Date Initially Approved by TRAP:
Date Heard by Variance Committee:
Date of TRAP Final Recommendation:
TRAP Final Recommendation:
Ready for Inclusion in Rule: NO

Issue Development Notes:

8/8/08 DOH Staff discussed.

8/27/08 TRAP tabled low pressure design issue for FOWA to study; Advised DOH to move forward with Water Billing Records issue; Advised DOH to work with soil scientists on Spodic Horizons Issue.

2/19/09 Brought all eight of Mr. Scharr's issues to TRAP.

You don't need to develop rule log for these - just a cover sheet to take to TRAP w/ this attachment.

D. St



DIVISION D
Environmental

AKE COUNTY HEALTH DEPARTMENT

Environmental Health
315 WEST MAIN STREET
P. O. BOX 1305
TAVARES, FLORIDA 32778-1305

PHONE: (352) 253-6130

FAX: (352) 253-6133

FAX TRANSMITTAL SHEET

DATE: 8-4-08

TIME: 2:30

TO: Gerald Briggs

FAX: 350-922-6969

FROM: Russ Melling

NUMBER OF PAGES (INCLUDING COVER SHEET): 11

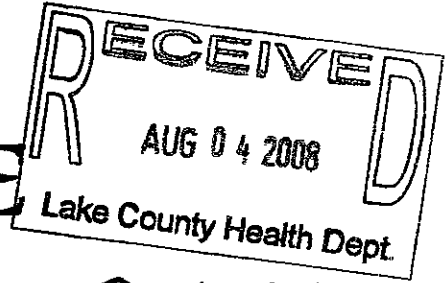
COMMENTS: Per our phone conversation
Rec'd from David Scharr P.E.
for TRAP

Thanks, Russ

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Pay

FACSIMILE



Date: 8-4-08

To: Russell Melling

Re: Code Issues

From: **David O. Scharr, P.E.**

FAX No: (407) 823-8108

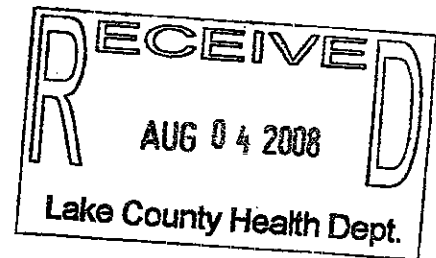
Number of Pages Including Cover Sheet 10

Message:

I request these issues be brought up for action.

David O. Scharr, P.E.
 4206 Winbrook Lane, Orlando, FL 32817
 Phone Number: (407) 823-7111

David O. Scharr, P.E.
4206 Winbrook Lane
Orlando, FL 32817
PE# 13132



To: TRAP Committee
Re: Issues for Consideration
Chapter 64 E-6 F.A.C.

August 5, 2008

Gentlemen:

During years of full time practice in the area of on-site Septic Systems, I have become aware of various issues that seem to warrant consideration for code clarifications or revisions. These issues may have been identified before and some have been addressed by memo, or E-mails containing Department of Health Interpretations.

It appears that the consideration of these issues may not have received appropriate legal or technical review in a formal process leading to rule revision, where required, and implementation statewide. This leads to confusion for designers and installers, inconsistent review, unnecessary variance procedures and potential legal challenges.

I have summarized (8) eight issues, briefly, which I feel should be addressed more thoroughly. I feel my recommendations can be supported rationally and I am prepared to do that. The issues range from situations created by changes in products, to long standing rule deficiencies, to recent significant Department of Health interpretations which deserve an independent review.

The summaries should contain sufficient detail for industry professionals but I would be happy to provide backup documents or explanation, if necessary. I'm hoping for appropriate consideration of these issues and rule changes where required, realizing that the Department of Health may consider an interpretation is sufficient to close discussion of an issue.

Sincerely,

A handwritten signature in black ink, appearing to read "David O. Scharr".

David O. Scharr, P.E.

(407) 823-7111

1. Lot Fill

Issue:

Lots filled with non-suitable soils/additional shoulder & slope treatment. [Chap. 64 E-6.005 & 64 E-6.009 (3) (6)]

Concern:

Lots where a filled or mounded system is specified may then be improperly filled with non-suitable material after a permit is issued. It is important, for proper functioning of the system that in the shoulder area, at least, the excavation and back fill extend through the unsuitable fill and Horizon "O." Since this aspect of the installation may not typically be subject to inspection, and unanticipated costs may result from field conditions encountered during construction, it should be clear what is required when this situation is encountered.

Recommendation:

That a Code revision be considered that addresses clearly the required treatment of shoulder/slope areas where non-suitable fill has been placed in the area of the system.

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Lake County Health Dept.

2. Fill between Chambers

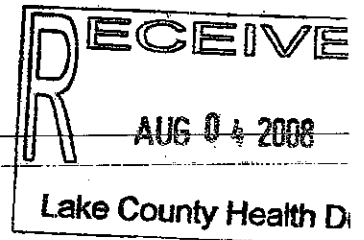
Issue: The quality of fill to be used between chamber products

Concern:

The quality of fill to be used between chamber products is not clearly specified in the rules. The use of moderately limited material, as allowed for soil caps, between chambers, may significantly reduce the capacity and life expectancy of the system.

Recommendation:

That Code revisions be considered which would require slightly limited material to be used between chambers, to be in place or on site at the time of inspection.



3. Unobstructed Area

Issue:

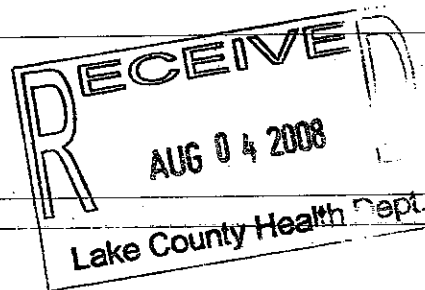
Required unobstructed area; Chapter 64 E-6.005 (4)/ Double the drain field area based on rock system.

Concern:

It is obvious that the area provided must accommodate the system and meet required setbacks but the requirement for additional area may not meet the intent because of many factors. Drain field replacement is much more widely used than adding additional drain field, which may not even be practical where systems are mounded or the area proposed as unobstructed may be irregular or unusable because of grading. Alternative products widely used which have a smaller foot print and trench systems, which actually have a larger footprint, reduce the unobstructed area requirement under the rule. Level sites with in ground systems are penalized compared to sites requiring mounded systems. Walkways have been interpreted as creating an unobstructed area boundary where in-ground systems can be designed to extend under and past walkways, with appropriate size increase.

Recommendation:

That the intent of this section be revisited and the rule revised as required, considering factors such as alternative products, bed or trench, standard or mounded configuration of area provided, and treatment of walkways to reflect the desired intent.



4. Low Pressure Design

Issue:

64 E-6.014 (3) requires low pressure design when the total required area of drain field of a system exceeds 1,000 S.F.

Concern:

Larger systems may be split into 2 drain fields because of space limitations, using 2 pumps. Where this is done and each drain field is 1,000 S.F. or less, the reason for low pressure design is eliminated and the additional cost is not justified.

Recommendation:

That the requirement for low pressure design be removed when an individually dosed drain field does not exceed 1,000 S.F.

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Lake County Health De

5. Table I – Residential

Issue:

Table I requires 100 GPD flow for each 750 S.F. or fraction thereof for residences over 3,300 S.F.

Concern:

This requires excessive system sizing for large residences - out of proportion to typical bedroom counts, occupancy, and actual sewage flow.

Recommendation:

That Table I be revised to incorporate larger increments of habitation area for larger homes, possibly increasingly larger as the area increases, starting at the 500 GPD level.



6. Water Billing Records

Issue:

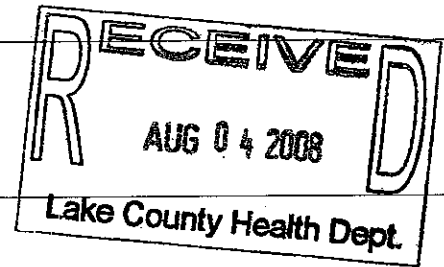
Paragraph 64 E- 6.015 (6) (d) has been interpreted by the Department of Health to require the use of billing records for water service to be used for the design flow for commercial repairs with no consideration or analysis allowed to arrive at estimated sewage flow.

Concern:

This interpretation ignores many factors that may cause billing records to be substantially higher than real sewage flow and unnecessarily increases the size and cost of repair installations.

Recommendation:

That designers be allowed to use good judgment in reviewing billing records and that Table I estimated flows be used when billing records do not provide sewage flow.



7. Effluent Dispersion

Issue:

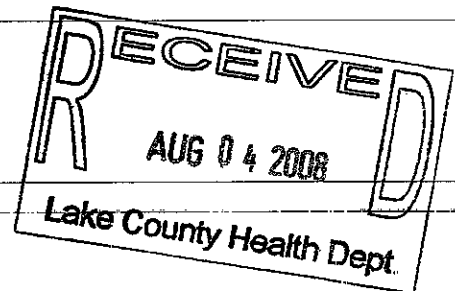
It has been interpreted by the Department of Health that the intent of the Statute and the Code is that no more than 2,500 GPD of effluent may be dispersed on a 1 acre area.

Concern:

The Code and the Statute address the generation of flow using an "average" per acre of 2,500 GPD. Dispersion is addressed also by set backs to water features, separation of drain fields, max drain field size and setback to wells and property lines. Further arbitrary requirements would affect site planning of large commercial and multifamily projects with questionable benefits. Extensive education efforts would be required for design professionals to implement this interpretation.

Recommendation:

That further dispersion requirements not be implemented without scientific study and normal committee review and implementation by code revision, if justified.



8. Spodic Horizons

Issue:

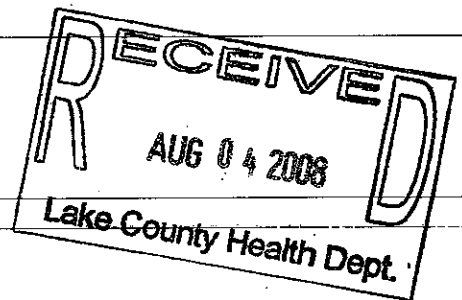
Memo of October 16, 1986 requires 42" separation to Spodic Horizons, or removal, assuming they are automatically severely limited.

Concern:

Horizons of soil in for example, Pomello, may be interpreted as Spodic Horizons, even though they are undeveloped and may not be restrictive to water movement. Normal Code procedures & Separations, with competent evaluators are sufficient to deal with these situations. Unnecessary excavation/replacement sometimes results because these undeveloped Spodic Horizons are evaluated over-conservatively to avoid a later re-excavation.

Recommendation:

That evaluators be allowed to make a judgment on the restrictive conditions during the site evaluation and design accordingly using normal code procedures and separations.



Issue Number: 08-18
Subject: Portable restrooms for temporarily displaced persons
Date New: 7/25/2008
Date Initially Heard by TRAP: 8/27/2008
Date Tabled by TRAP:
Date Initially Approved by TRAP: 8/27/2008
Date Heard by Variance Committee: 10/2/2008
Date of TRAP Final Recommendation:
TRAP Final Recommendation:
Ready for Inclusion in Rule: NO

Issue Development Notes:

8/27/08 TRAP approved for Variance Committee

10/2/08 Variance Committee comments: ENG,HBI,DEP, STI-no comment; CHD,SHO-ok

**STATE OF FLORIDA
DEPARTMENT OF HEALTH
CHAPTER 64E-6, FLORIDA ADMINISTRATIVE CODE
STANDARDS FOR ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS**

PART I

64E-6.001 General

(1) No change

(2) Structures used or intended for human occupancy, employment or service to the public and locations where people congregate, such as construction sites, fairs, [housing for displaced persons](#), and field locations for agricultural workers shall provide approved wastewater treatment and disposal systems. Except for the provisions of Rule 64E-6.0101, permanent structures shall not rely upon the use of holding tanks and portable toilets for wastewater treatment and disposal.

(3) through (7) No change

Specific Authority 381.0011(4), (13), 381.0065(3)(a), 489.553(3), 489.557(1) FS. Law Implemented 381.0065, 381.0067, 386.041, 489.553, FS. History—New 12-22-82, Amended 2-5-85, Formerly 10-6.41, Amended 3-17-92, 1-3-95, 5-14-96, 2-13-97, Formerly 10D-6.041, Amended 11-19-97, 2-3-98, 3-22-00, 9-5-00, 05-24-04, 11-26-06,_____.

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

(1) through (6) No change

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

(a) through (x) No change

[\(y\) Whenever temporary housing is provided to people who are homeless as a result of displacement from their homes either by immigration, natural disaster, or financial hardship, a minimum of one toilet, one hand washing sink, and one shower for each 20 people or fraction thereof shall be provided at the housing facility.](#)

(8) No change

Specific Authority: 381.0011(4), (13), 381.0065(3)(a), 489.553(3), FS. Law Implemented: 381.0012, 381.0065, 386.041, FS. History: New 05-24-04, Amended 11-26-06,_____.

Issue Number: 9-01
Subject: Non-Transient Recreational Vehicle Space Flow
Date New: 1/16/2009
Date Initially Heard by TRAP:
Date Tabled by TRAP:
Date Initially Approved by TRAP:
Date Heard by Variance Committee:
Date of TRAP Final Recommendation:
TRAP Final Recommendation:
Ready for Inclusion in Rule: NO

Issue Development Notes:
None

64E-6.008 System Size Determinations

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

- (a) through (b) No change

**TABLE I
For System Design
ESTIMATED SEWAGE FLOWS**

TYPE OF ESTABLISHMENT	GALLONS PER DAY
COMMERCIAL:	
Airports, bus terminals, train stations, port & dock facilities,	
Bathroom waste only	
(a) per passenger	4
(b) add per employee per 8 hour shift	15
Barber & beauty shops per service chair	75
Bowling alley bathroom waste	
only per lane	50
Country club	
(a) per resident	100
(b) add per member or patron	25
(c) add per employee per 8 hour shift	15
Doctor and Dentist offices	
(a) per practitioner	250
(b) add per employee per 8 hour shift	15
Factories, exclusive of industrial wastes	
gallons per employee per 8 hour shift	
(a) No showers provided	15
(b) Showers provided	25
Flea Market open 3 or less days per week	
(a) per non-food service vendor space	15
(b) add per food service establishment	
using single service articles only per	
100 square feet of floor space	50
(c) per limited food service establishment	25
(d) for flea markets open more than	
3 days per week, estimated flows	
shall be doubled	
Food operations	
(a) Restaurant operating 16 hours or less	
per day per seat	40
(b) Restaurant operating more than 16 hours	
per day per seat	60
(c) Restaurant using single service articles only	
and operating 16 hours or less per day	
per seat	20
(d) Restaurant using single service articles only	
and operating more than 16 hours per day	
per seat	35
(e) Bar and cocktail lounge per seat	20
add per pool table or video game	15
(f) Drive-in restaurant per car space	50
(g) Carry out only, including caterers	
1. per 100 square feet of floor space	50
2. add per employee per 8 hour shift	15
(h) Institutions per meal	5

(i) Food Outlets excluding deli's, bakery, or meat department per 100 square feet of floor space.....	10
1. add for deli per 100 square feet of deli floor space	40
2. add for bakery per 100 square feet of bakery floor space	40
3. add for meat department per 100 square feet of meat department floor space	75
4. add per water closet.....	200
Hotels & Motels	
(a) Regular per room.....	100
(b) Resort hotels, camps, cottages per room	200
(c) Add for establishments with self service laundry facilities per machine.....	750
Mobile Home Park <u>or Recreational Vehicle Park</u>	
(a) per single wide mobile home <u>space</u> <u>or non-transient recreational vehicle</u> space, less than 4 single wide spaces connected to a shared onsite system	250
(b) per single wide mobile home <u>space</u> <u>or non-transient recreational vehicle</u> space, 4 or more single wide spaces are connected to a shared onsite system	225
(c) per double wide mobile home space, <u>or non-transient recreational vehicle space,</u> less than 4 double wide mobile home -spaces connected to a shared onsite system.....	300
(d) per double wide mobile home space, <u>or non-transient recreational vehicle space</u> 4 or more double wide mobile home spaces connected to a shared onsite system	275
(e) <u>per transient recreational vehicle space for</u> <u>overnight stay, without water</u> <u>and sewer hookup per vehicle space.....</u>	50
(f) <u>per transient recreational vehicle space for</u> <u>overnight stay, with water and sewer</u> <u>hookup per vehicle space.....</u>	75
Office building	
per employee per 8 hour shift or	15
per 100 square feet of floor space, whichever is greater	15
Transient Recreational Vehicle Park	
 (a) Recreational vehicle space for overnight stay, without water and sewer hookup per vehicle space.....	50
 (b) Recreational vehicle space for overnight stay, with water and sewer hookup per vehicle space.....	75
Service stations per water closet	
(a) Open 16 hours per day or less	250

(b) Open more than 16 hours per day	325
Shopping centers without food or laundry	
per square foot of floor space	0.1
Stadiums, race tracks, ball parks per seat	4
Stores per bath room.....	200
Swimming and bathing facilities, public	
per person	10
Theaters and Auditoriums, per seat	4
Veterinary Clinic	
(a) per practitioner	250
(b) add per employee per 8 hour shift	15
(c) add per kennel, stall or cage	20
Warehouse	
(a) add per employee per 8 hour shift	15
(b) add per loading bay	100
(c) self-storage, per unit (up to 200 units).....	1
add 1 gallon for each 2 units or fraction thereof, for over 200 units	
and shall be in addition to employees, offices or living quarters flow rates.	
INSTITUTIONAL:	
Churches per seat which includes kitchen	
wastewater flows unless meals prepared	
on a routine basis.....	3
If meals served on a regular basis add	
per meal prepared.....	5
Hospitals per bed which does not include	
kitchen wastewater flows	200
add per meal prepared	5
Nursing, rest homes, adult congregate living	
facilities per bed which does not	
include kitchen wastewater flows.....	100
add per meal prepared	5
Parks, public picnic	
(a) with toilets only per person	4
(b) with bathhouse, showers & toilets	
per person	10
Public institutions other than schools and	
hospitals per person which does not	
include kitchen wastewater flows.....	100
add per meal prepared	5
Schools per student	
(a) Day-type	10
(b) Add for showers	4
(c) Add for cafeteria.....	4
(d) Add for day school workers.....	15
(e) Boarding-type.....	75
Work/construction camps, semi-permanent	
per worker	50
RESIDENTIAL:	
Residences	
(a) Single or multiple family per dwelling	
unit	
1 bedroom with 750 sq. ft. or less	
of building area.....	100
2 bedrooms with 751-1200 sq. ft.	
of building area.....	200
3 bedrooms with 1201-2250 sq. ft.	

of building area.....	300
4 bedrooms with 2251-3300 sq. ft.	
of building area.....	400
for each additional bedroom or each additional 750 square feet of building area or fraction thereof in a dwelling unit, system sizing shall be increased by 100 gallons per dwelling unit.	
(b) Other per occupant	50

Footnotes to Table I:

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

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

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

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

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

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

(2) through (6) No change

Specific Authority ~~381.0011(4),(13)~~, 381.0065(3)(a), FS. Law Implemented 381.0065, FS. History—New 12-22-82, Amended 2-5-85, Formerly 10D-6.48, Amended 3-17-92, 1-3-95, Formerly 10D-6.048, Amended 11-19-97, Amended 3-22-00, 9-5-00, 11-26-06, .