Fla. Admin. Code R. 64E-6.012

Current through Reg. 47, No. 213; November 2, 2021

Section 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) Aerobic treatment units designed to treat up to 1500 gallons of sewage waste per day shall be listed by a third party certifying program approved by the State Health Office. Aerobic treatment units shall be in compliance with at least one of the following standards: Class I systems as defined by NSF International Standard/American National Standard (NSF/ANSI) 40-2013, "Residential Wastewater Treatment Systems," revised April 2013; nitrogen reduction as defined by NSF/ANSI 245-2013, "Wastewater Treatment Systems Nitrogen Reduction," revised April 2013; or onsite residential and commercial water reuse treatment systems as defined by NSF/ANSI 350-2013, "Onsite Residential and Commercial Water Reuse Treatment Systems," revised December 2012. These NSF/ANSI standards are hereby incorporated by reference, have been deemed copyright protected, and are available for inspection at the Department of Health, Bureau of Environmental Health, 4025 Esplanade Way, Tallahassee, Florida 32399-1710 or at the Department of State, R.A. Gray Building, 500 South Bronough Street, Tallahassee, Florida 32399-0250. An approved third party certifying program shall comply with the following provisions in order for units which it has certified to be approved for use in Florida:
- (a) Be accredited by the American National Standards Institute.
- **(b)** Have established procedures which send representatives to distributors in Florida on a recurring basis to conduct evaluations to assure that distributors of certified aerobic units are providing proper maintenance, have sufficient replacement parts available, and are maintaining service records.
- **(c)** Notify the department State Health Office of the results of monitoring visits to manufacturers and distributors within 60 days of the conclusion of the monitoring. Approved distributors must be reported by the manufacturer to the certifying agency.
- (d) Submit completion reports on testing for review by the State Health Office.
- **(e)** Provide a registered certification mark or seal which must be affixed in a conspicuous location on the units it has certified. This mark or seal will alert persons evaluating or maintaining the unit that the unit is in compliance with the NSF/ANSI standard appropriate for the application.

- (2) The following additional requirements shall also apply to the construction, design, and operation of aerobic treatment units treating 1500 gallons per day or less:
- **(a)** An appropriate mechanism shall be provided to make access ports vandal, tamper, and child resistant. Acceptable protection of openings shall consist of one or more of the following methods as specified by the tank manufacturer:
- 1. A padlock.
- 2. An "O" ring with twist lock cover requiring special tools for removal.
- 3. Covers weighing 65 pounds or more, net weight.
- **4.** A hinge and hasp mechanism which uses stainless steel or other corrosion resistant fasteners to fasten the hinge and hasp to the lid and tank for fiberglass, metal, or plastic lids.
- **(b)** A minimum of a 4-inch diameter sampling access port located between the treatment unit outlet and the drainfield.
- **(c)** A visual and audio warning device shall be installed in a conspicuous location so that activation of such warning device will alert property occupants of aerobic unit malfunction or failure. All warning devices shall be wired separately from the aerobic unit so that disconnecting the aerobic unit from electricity will activate the warning device. If installed outside, the alarm shall be waterproof.
- **(d)** Each unit shall be designed or equipped so that regardless of unusual patterns or frequencies of sewage flow into the system effluent discharged to the drainfield will be in compliance with the applicable standards of subsection (1), above.
- **(e)** Minimum required treatment capacities for systems serving any structure, building or group of buildings shall be based on estimated daily sewage flows as determined from Table IV.

TABLE IV

AEROBIC SYSTEMS

PLANT SIZING

RESIDENTIAL:		
Number of Bedrooms	Building Area in square feet	Minimum Required Treatment Capacity
		Gallons Per Day
1 or 2	Up to 1200	400
3	1201-2250	400

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

COMMERCIAL:

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
801-1,000	1000
1001-1200	1200
1201-1500	1500

Footnotes to Table IV

- **1.** Where the number of bedrooms and the corresponding building area in Table IV do not coincide, the criteria which results in the greatest required treatment capacity shall apply.
- **2.** These figures assume that the aerobic system will be treating domestic strength sewage with $CBOD_5$ and suspended solids values typically not exceeding 300 and 200 milligrams per liter, respectively. For wastewaters with higher $CBOD_5$, higher suspended solids values, or for facilities that exhibit short-term hydraulic surge conditions, additional treatment or pre-treatment facilities shall be required when specified by design engineers, plant manufacturers, or by the DOH county health department.

- **(f)** There shall be no bypass capability designed into the system which will allow waste to be discharged to the drainfield without undergoing all the treatment processes necessary to achieve the desired effluent quality. Bypassing, removing, or excluding any component or components of a system after the system has received final installation approval is prohibited.
- **(g)** Effluent from an aerobic treatment unit shall be disposed of on the owner's property in conformance with other requirements of this chapter except as provided for in paragraph (f), above. Effluent quality which is found to not meet its standards shall be reported to the maintenance entity for correction within 10 working days.
- **(h)** Where slightly limited soil textures exist on a site, the required drainfield size may be reduced by 25 percent from the requirements in subsection 64E-6.008(5), or paragraph 64E-6.009(3)(d), F.A.C.
- (i) A manufacturer, distributor or seller of aerobic treatment units shall furnish, to the State Health Office, in Microsoft Word document format, Portable Document Format (PDF) or other electronic format accepted by the Department, a copy of the completion reports and engineering drawings showing the design and construction details of all models of approved Class I units to be constructed or installed under the provisions of this rule. The State Health Office will forward these reports and drawings to each DOH county health department. No aerobic unit shall receive final installation approval until the unit is found to be in compliance with all provisions of this rule, including compliance with design and construction details shown on the engineering plans filed with DOH county health departments and the State Health Office.
- **(j)** Manufacturers shall provide a listing of approved maintenance entities they have authorized to provide service in the state and shall demonstrate that the entire state is covered by at least one maintenance entity. A system using a manufacturer's unit shall not be approved in the state if the manufacturer cannot demonstrate that there are maintenance entities to service it.
- **(k)** A distributor of a specific manufacturer's brand or model of an approved aerobic treatment unit shall provide to the DOH county health department and State Health Office written assurance that spare mechanical and structural parts are available, upon request, for purchase, to all other approved maintenance entities.
- (1) Where local building occupancy codes require that the DOH county health department approve the means of sewage disposal prior to building occupancy or change of occupancy, and where an aerobic treatment unit is utilized, a current, unexpired aerobic treatment unit maintenance contract between the property owner or lessee and an approved maintenance entity shall be one of the required conditions of system approval.
- **(m)** A copy of the signed maintenance agreement between the property owner or property lessee and an approved maintenance entity shall be provided to the DOH county health department by the maintenance entity. The maintenance agreement shall:
- **1.** Initially be for a period of at least 2 years and subsequent maintenance agreement renewals shall be for at least 1 year periods for the life of the system.

- **2.** Provide that a maintenance entity which desires to discontinue the provision of maintenance services, notify in writing, the property owners and lessees and the DOH county health department at least 30 days prior to discontinuance of service.
- **3.** Provide that, if a private maintenance entity discontinues business, property owners who have previously contracted with the discontinued maintenance service shall, within 30 days of the service termination date, contract with an approved maintenance service and provide the DOH county health department a copy of the newly signed maintenance agreement.
- **4.** Provide that each aerobic unit is inspected by an approved maintenance entity at least two times each year. Aerobic treatment units serving commercial establishments shall be inspected four times per year. The maintenance entity shall furnish to the DOH county health department a listing of all aerobic units inspected or serviced during the respective reporting period. As a minimum, reports shall indicate the system owner or building lessee, the street address of the system, the date of system inspection or service and a statement as to the maintenance or service performed. The maintenance entity shall also include a list of the owners who have refused to renew their maintenance agreement.
- **(n)** The DOH county health department shall, at least annually, inspect the maintenance and performance of aerobic treatment units. The DOH county health department shall also inspect each authorized maintenance entity, including review of their service records and maintenance agreements.
- (3) An aerobic treatment unit used for treating domestic or commercial sewage flows in excess of 1,500 gallons per day, or a combination of aerobic treatment units treating flows according to paragraph 64E-6.004(4)(a) or (b), F.A.C., shall be designed and certified by an engineer licensed in the State of Florida. The design shall include an assessment of wastewater strength. The certification shall state that the unit is capable of consistently meeting, at minimum, secondary treatment standards for $CBOD_5$ and TSS established in paragraph 62-6.025(12)(a), F.A.C. In addition, the following requirements shall also be met:
- (a) The owner or lessee of a system shall comply with the applicable safety, maintenance and operational requirements of subsection (2), above. Unless the system owner or lessee is a state licensed wastewater treatment plant operator, the owner or lessee shall be required to have a system maintenance agreement with a permitted aerobic unit maintenance entity which has at least a Class D state certified operator who has been certified under the provisions of chapter 62-602, F.A.C.
- **(b)** A permitted aerobic unit maintenance entity shall collect effluent quality samples and submit the sample analysis reports to the DOH county health department. Effluent quality samples for $CBOD_5$ and suspended solids shall be collected at least semi-annually and such samples shall be analyzed by a department-approved laboratory.
- (c) Written sample analysis reports shall be submitted to the DOH county health department by no later than the 15th of the next month following the semi-annual sampling period. However, if the sample analysis for $CBOD_5$ or suspended solids exceeds secondary treatment standards by more than 100 percent, the maintenance entity or certified operator shall notify the DOH county health department by telephone or in person within 24 hours after receipt of sample analysis results.

- **(d)** The DOH county health department shall monitor the maintenance and performance of aerobic treatments units as required by paragraph (m), above.
- (4) No aerobic treatment unit shall be serviced or repaired by a person or entity engaged in an aerobic treatment unit maintenance service until the service entity has obtained an annual written permit issued on Form DH 4013 from the DOH county health department in the county where the service company is located. Each service entity shall employ at least one plumbing contractor licensed under section 489.105(3)(m), F.S., septic tank contractor registered under Part III of Chapter 489, F.S., or a state-licensed wastewater treatment plant operator, who is responsible for maintenance and repair of all systems under contract. Application for a Maintenance Service Permit, Form DH 4066, 02/10, herein incorporated by reference, shall be made to the DOH county health department and shall contain the following information:
- (a) Evidence that the maintenance entity possesses a manufacturer's maintenance and operations manual and has received training from the manufacturer in proper installation and service of the unit and has received written approval from the manufacturer to perform service on their units. The manual shall contain detailed instructions on proper operation and maintenance procedures, a replacement parts list for all models being installed and maintained, a statement giving the capabilities of each unit, instructions on how to detect a malfunctioning unit and what to expect from a properly functioning unit.
- **(b)** A signed statement from the applicant attesting that the applicant has adequate staff, possesses proper equipment and has sufficient spare structural and mechanical parts and components to perform routine system monitoring and servicing and is able to make a service response within 36 hours after notification of the need for emergency repairs.
- **(c)** Payment of \$25.00 to the DOH county health department per annum for the aerobic treatment unit maintenance service permit.
- **(5)** Emergency service necessary to prevent or eliminate an imminent sanitary nuisance condition caused by failure of a mechanical component of any aerobic treatment unit shall be reported by the approved aerobic unit maintenance entity, in writing, to the DOH county health department no later than 5 working days after the date of the emergency service.
- **(6)** All materials incorporated herein may be obtained from the Bureau of Onsite Sewage Programs at www.MyFloridaEH.com or 4052 Bald Cypress Way, Bin Ao8, Tallahassee, Florida 32399-1713.

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Rulemaking Authority 381.0065(3)(a), 489.553(3) FS. Law Implemented 381.0065, Part I 386 FS.

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