February 2025

Requirements for Aerobic Treatment Unit (ATU) Approval in Florida

Under Florida Law, the Florida Department of Environmental Protection (the Department) regulates Onsite Sewage Treatment and Disposal Systems (OSTDS) and all their components installed in the State under Chapter 62-6, Florida Administrative Code (F.A.C.). Information on OSTDS regulations can be obtained by clicking on the following link to the Onsite Sewage Program.

An aerobic treatment unit (ATU) is a wastewater treatment unit that introduces air into sewage for more effective treatment. Typically, ATUs are composed of a treatment unit housed in a tank, which discharges to a drainfield. In Florida, ATUs can be permitted under the ATU permitting category (under rule 62-6.012, F.A.C.) or permitted as a component of a performance-based treatment system (PBTS). PBTS must be engineer designed, have more application requirements, and can be used to get certain benefits that are not allowed for systems permitted as ATUs, such as increased authorized sewage flows or decreased setbacks, as described in rules 62-6.025-6.0295, F.A.C.

This document describes the approval process for ATU treating 400 to 1500 gallons of sewage per day and certified to NSF/ANSI Standards 40, 245, or 350 by a third-party certifying program. It is the same process for corresponding PBTS approvals allowed under (rule 62-6.025(7)(a), F.A.C.). Note that all PBTS, including those approved by this process, are permitted under the requirements of rules 62-6.025-6.0295, F.A.C.

After product approval, the local permitting authority handles site-specific system construction permitting. An operating and maintenance contract is required for all ATUs and PBTS.

Reasons to install an ATU or PBTS may include:

- NSF Standard 245 ATUs or nitrogen-reducing PBTS are treatment options to comply with Spring Basin Management Action Plans (BMAPs) or comply with HB 1379 enhanced nutrient-reducing requirements;
- the ATU provides treatment required for a 25% drainfield reduction (in slightly limited soils);
- a county ordinance requires ATUs or PBTS;
- the ATU or PBTS provides required treatment for a drip irrigation system; or
- the PBTS provides the treatment required for a 40% drainfield size reduction (in slightly limited soils), increased authorized sewage flow or decreased setbacks described in rule 62-6.028, F.A.C.

ATUs and PBTS that are approved are posted to the Department's website at the links below:

- NSF Standard 40 ATUs
- NSF Standard 245 ATUs
- Performance Based Treatment Systems.

Additional approvals may be required for use of an ATU or PBTS in Florida. Rule 62-6.013 F.A.C. requires any tanks, including those used to house ATUs, be approved before use in Florida. If a tank required for use of the ATU is not on the list of approved tanks, a tank approval is required. Once a tank is approved to house a particular ATU, this will be reflected in the remarks section on the tank listing.

In addition, section 381.0065(4)(m) Florida Statute (F.S.) rule 62-6.0151, F.A.C. prohibit any

products used in an onsite system from causing discharges that violate water quality standards. Therefore, any products used in ATUs that could discharge to the drainfield must be reviewed for compliance with (rule 62-6.0151, F.A.C.). For more information on additive review, see Product Composition/Additives | Florida Department of Environmental Protection.

What documentation is required for the ATU approval process?

No fees or formal application form is required for ATU approval in Florida; however, the following documentation must be submitted to OSP_ProductApproval@floridadep.gov **and** Debby.Tipton@FloridaDEP.gov:

Demonstration of ATU-compliance with rule 62-6.012(2)(c), (i), (j) and (k), F.A.C.:

- 62-6.012(2)(c), F.A.C.: *A visual and audio warning device must be installed in a conspicuous location so that activation of such warning device will alert property occupants of aerobic unit malfunction or failure. The visual and auditory signals must continue to be functional in the event of an electrical, mechanical, or hydraulic malfunction of the system provided power is available to the system and must resume once power is restarted following the power outage. This does not mandate a battery back-up for the alarm system. If installed outside, the alarm must be waterproof.*
    - Provide the electrical wiring diagram and verify if it is the same as the one that is NSF certified.
    - Confirm the alarm is waterproof, if installed outside.
- 62-6.012(2)(i), F.A.C.: *To apply for approval of aerobic treatment unit models, a manufacturer, distributor or seller of aerobic treatment units must furnish, to the Department a written request for approval, a copy of the completion reports, owner manual, part list, and engineering drawings showing the design and construction details of all models of approved aerobic treatment units to be constructed or installed under the provisions of this rule in Portable Document Format (PDF) or other electronic format accepted by the Department. The documentation submitted must demonstrate for each unit model, the treatment unit tank in which it will be installed, and its installation and operation, complies with all provisions of this chapter. The applicant must respond to requests for additional information about their application for aerobic treatment unit approval from the Onsite Sewage Program within 60 calendar days after receipt of a request for additional information. The Department will forward these reports and drawings to Division and District offices. No aerobic unit will 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 the Department.*
    - Provide an electronic copy of the third-party testing report or reports to NSF Standard 40, 245 or 350.
    - Provide the most current version of the operations and maintenance manual for review for compliance with 62-6, Florida Administrative Code.
    - Provide an upscale letter from the third-party certifying program for models with treatment capacities greater than the model tested by the certified testing agency, if approval of higher treatment capacity units is being sought.
- 62-6.012(2)(j), F.A.C.: *Manufacturers must provide to the Onsite Sewage Program a listing of approved maintenance entities they have authorized to provide service in the*

state and must demonstrate that the entire state is covered by at least one maintenance entity. A system using a manufacturer's unit must not be approved in the state if the manufacturer cannot demonstrate that there are maintenance entities to service it..

  - Provide a listing of approved maintenance entities and indicate that they will cover the entire state of Florida.

- 62-6.012(2)(k), F.A.C.: *A manufacturer of a specific brand or model of an approved aerobic treatment unit must provide to the Department written assurance that spare mechanical and structural parts, as well as the mechanisms used to make the access ports vandal, tamper, and child resistant, are available, upon request, for purchase, to all approved maintenance entities.*

  - Provide a parts list and a statement that these parts are available, upon request, to all other approved maintenance entities.

- In addition, tanks must be approved to house ATUs prior to ATU approval in Florida (rule 62-6.013, F.A.C.).
  - If Florida-approved treatment tanks will be used, specify the approval number(s). The list of approved treatment tanks can be found here: Septic Tanks Designs.
  - If new treatment tanks will be used, these must be approved in the state of Florida. Rule 62-6.013, F.A.C. pertains to the construction materials and standards for treatment tanks, including testing requirements. If tank approvals are required, let us know and we will forward information about the tank approval process.

- Information about how air lines and electrical wires enter or exit the treatment receptacle. Rule 62-6.013(9)(b)(1), (2), and (3), F.A.C. has specific requirements about how electrical wires can exit the receptacle:

  (1) Through the tank outlet using plumbing fittings and reducers to produce a watertight seal,

  (2) When risers are used, the electrical line and the effluent dosing pipe may penetrate the riser wall provided the penetration is above the wet season high water table elevation and there is a soil-tight seal around the penetrations. When the top of the dosing tank is placed more than 8" inches below the finished grade, risers must be used to provide access within 8" inches of the finished grade. Where risers are used, risers must be attached to the tank in accordance with paragraph 62-6.013(2)(i), F.A.C. Any unused tank outlet must be sealed with a length of capped PVC pipe installed in accordance with paragraph 62-6.013(2)(f), F.A.C., or

  (3) Through a 2 to 4" inch access port installed in the tank lid by the manufacturer as approved by the Department. After installation the port must be sealed with a bonding compound per paragraph 62-6.013(2)(i), F.A.C. Unused ports must be sealed watertight with cement or bonding compound or with a length of capped PVC pipe.

  - Review this section and indicate on your drawings that these requirements will be satisfied. Also indicate how the airline will enter the tank.