

ATU DO's & DON'Ts

DO's

✓ **DO** keep detailed records and information on your ATU. This includes model name, capacity, date installed, contract service agreements, records of service visits, and maintenance performed.

✓ **DO** conserve water to avoid overloading the system. Repair leaky faucets and toilets. Use water saving features on appliances.

✓ **DO** divert other sources of water like roof drains, house footing drains, and sump pumps away from the ATU.

✓ **DO** become familiar with how your system operates. Know the way it looks, smells, and sounds when operating properly.

DON'Ts

✗ **DON'T** allow anyone to park or drive over any part of your system.

✗ **DON'T** make or allow unauthorized repairs or changes to your ATU without obtaining a health department permit.

✗ **DON'T** use a garbage disposal without checking with the health department to make sure your ATU can accommodate this additional waste.

✗ **DON'T** attempt to clean or perform maintenance on any sealed ATU components.

✗ **DON'T** flush or pour any chemicals into your system. Harsh chemicals can disrupt your system.

ATU MAINTENANCE CHART				
Notes	Cost	Service Performed By	Service Performed	Date

Additional Information

Louisiana's Website for Onsite Wastewater:
Office of Public Health
www.oph.dhh.state.la.us

Contact Information by Parish Health Units:
Parish Health Units
www.oph.dhh.state.la.us/ophregions/index.html

Louisiana's Regulations for Sewage:
Title 51 of the *Louisiana Sanitary Code*
www.state.la.us/osr/lac/51v01/51v01.pdf

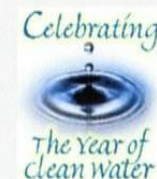
Websites for Onsite Wastewater Treatment Information:
Environmental Protection Agency
www.epa.gov/owm/onsite
National Small Flows Clearinghouse
www.nesc.wvu.edu

Permitting Standards for Individual Mechanical Plants Website:
National Sanitation Foundation
www.nsf.org

References

Pipeline, Winter 1996, Volume 7, Number 1

Small Flows Quarterly, Spring 2003, Volume 4, Number 2



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LOUISIANA DEPARTMENT OF HEALTH & HOSPITALS

Public Education Series

Home Aerobic Treatment Units

What You Need to Know About Your Home Sewage System



FLUSHING FACTS

DO NOT FLUSH...

- coffee grounds
- dental floss
- disposable diapers
- kitty litter
- sanitary napkins
- tampons
- cigarette butts
- condoms
- gauze bandages
- fat, grease, or oil
- paper towels

NEVER FLUSH CHEMICALS

LIKE...

- paints
- varnishes
- thinners
- waste oils
- photographic solutions
- pesticides

These items can destroy the biological processes taking place in your sewage treatment system.

WARNING SIGNS

Watch for the following indications of potential problems with your aerobic treatment unit.

- Alarms or lights going off
- Changes in your system's normal operating sound
- Changes in the normal color of sewage in the aeration chamber (a greyish brown color rather than chocolate brown could indicate a problem)
- Excess solids, foam, or scum in the unit
- Plumbing backups
- Sewage odors in the house or yard

What is an aerobic treatment unit?

A home aerobic treatment unit (ATU) is a pre-engineered wastewater treatment machine whose main function is to collect and treat household sewage. It is also referred to as a mechanical treatment plant. With proper design, operation, and maintenance ATU's can provide a high level of sewage treatment. They come in many shapes and sizes and are extremely important in protecting human health and the environment.

Why would an aerobic treatment unit be recommended for my house?

There are many reasons for utilizing an ATU for sewage treatment. All the factors below have a part in determining the appropriate sewage treatment method.

- Quality of the underlying soil
- Location of the water table
- Amount of land available
- Condition of surrounding waterways

How do aerobic treatment units work?

Aerobic treatment systems treat wastewater in three stages.

- 1. Pretreatment:** The first stage reduces the amount of solids (oils, grease, toilet paper, etc.) going into the ATU. A septic tank, primary settling compartment, or a trash trap are pretreatment tanks. This is optional, but may improve ATU performance.
- 2. Aeration:** The second stage forces oxygen to mix with the wastewater in the aeration chamber. This allows the beneficial bacteria to thrive and breakdown the sewage. Without a pretreatment chamber, the solids would settle out as sludge. Figure 1 is a typical schematic of an ATU without a pretreatment tank.
- 3. Final Treatment:** The final step includes

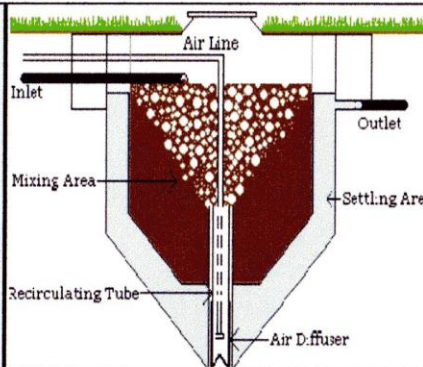


Figure 1: Typical Home Aerobic Treatment Unit

disinfection and effluent reduction. These two processes are discussed below.

Disinfection destroys disease-causing microorganisms in the sewage. Depending on where your wastewater ultimately flows to, you may be required to disinfect it before discharging. A popular disinfection method is chlorination; this inactivates the disease-causing microorganisms. Disinfection protects public health and is highly recommended.

Effluent Reduction is required to minimize the amount of wastewater being discharged. It is designed to maximize the use of the adsorptive capacity of the soil, even in poor soil conditions. There are many options for effluent reduction described in detail in Louisiana's *Sanitary Code*. Effluent reduction fields, rock plant filters, spray irrigation, overland flow systems, and mound systems are allowed by the *Louisiana State Sanitary Code*.

Other important features of the ATU are the controls and alarms. Some ATU's have controls that allow the homeowner to switch off power in case of an emergency. Alarms are required to alert the homeowner of malfunctions. Depending on the design of the ATU the controls can be located inside or outside the home, and alarms can be visible, audible or both.

Why do I need to maintain my aerobic treatment unit?

Maintenance is key to the life and performance of ATU's. Poor maintenance practices can wreak an ATU, forcing expensive repairs or replacements at the homeowners expense. With proper care of any onsite sewage system, you can expect a long life and good performance.

Keep in mind that you could be putting your family's health at risk if you are discharging improperly treated wastewater into your yard or ditch. Sewage contains harmful bacteria, viruses, and parasites that can cause many illnesses.

How do I properly maintain my aerobic treatment unit?

One of the main design criteria of ATU's is the level of aeration provided for sewage treatment. Therefore, maintaining the blower is essential to the treatment process.

Another important issue is the sludge that builds up over time. Therefore, the ATU should be pumped periodically to remove the solids that settle to the bottom. The amount of organic matter entering the ATU will determine the pump schedule. A general rule of thumb is to pump it every three to five years.

With the purchase of any ATU, the first two years of service visits will be included in the deal. You need to make sure those service visits are done. After that you will have an option

If you have any questions or complaints concerning onsite sewage, please do not hesitate to contact us.

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