

WHAT IS AN ALTERNATIVE TREATMENT SYSTEM?

Advanced treatment systems (ATUs) are subsurface wastewater treatment systems that may be utilized when criteria for a conventional OWTS cannot be met. These systems use various technological methods to treat wastewater from household plumbing produced by bathrooms, kitchen drains, and laundries. Examples of ATUs include aerobic systems, sand filters, and pressurized drip systems.

WHY IS IT IMPORTANT TO PROPERLY MAINTAIN MY ALTERNATIVE TREATMENT UNIT?

It saves money!

Malfunctioning systems can cost \$8,000-\$20,000 to repair or replace compared to annual maintenance costs of about \$500-1000 in service agreement fees. It is recommended to maintain annual service agreements for all alternative systems.

It protects the value of your home.

Malfunctioning septic systems can drastically reduce property values, hamper the sale of your home, and even pose a legal liability.

It keeps your water clean and safe.

A properly maintained system helps keep your family's drinking water pure, and reduces the risk of contaminating community, local, and regional waters.

It keeps the environment clean.

Malfunctioning septic systems can harm the local ecosystem by killing native plants, fish, and shellfish.

WHEN SHOULD I CONTACT ENVIRONMENTAL HEALTH?

- ◇ If you need to install a new alternative treatment system
- ◇ If you need to make any major repair to your advanced treatment system
- ◇ If you are remodeling your home
- ◇ If you are adding a pool or additional structure



The Homeowner's Guide:

THE PROPER CARE AND MAINTENANCE OF ALTERNATIVE TREATMENT SYSTEMS (ATUs)

WHAT ARE MY RESPONSIBILITIES AS AN OWNER OF AN ALTERNATIVE TREATMENT SYSTEM?

- Obtain and renew your annual renewable operating permit for your system.
- Maintain a service agreement with a Qualified Service Provider (QSP) trained by the manufacturer.
- Obtain an annual inspection by the QSP to ensure proper operation and maintenance of the system.

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HOW DOES AN ATU WORK?

There are several types of alternative treatment systems which consist of, but are not limited to: a septic tank, pump chambers, filter medium, grinder pump, oxygen chamber, and absorption fields. Below is a brief overview of how alternative treatment systems work.

- ◇ All water runs out of your house from one main drainage pipe into a septic tank.
- ◇ The septic tank is a buried, water-tight container usually made of concrete, fiberglass, or polyethylene. It holds the wastewater long enough to allow solids to settle down to the bottom (forming sludge), while the oil and grease float to the top (as scum). A pump is placed in the effluent chamber prior to moving to next the phase of oxygenation and/or filtration for pre-treatment.
- ◇ The pre-treated waste is then sent out to the absorption field which has various engineered designs (based on soil/site restrictions). The absorption field is “dosed” with the appropriate amount of liquid calculated by the engineering analysis.
- ◇ Finally, the treated wastewater percolates into the soil, naturally removing any leftover harmful bacteria, and viruses.

DO I HAVE AN ATU? IF SO, HOW CAN I FIND IT?

Here are a few tips to determine if you have an alternative treatment system and how to locate it.

You most likely have a system if:

- ◇ You are on well water.
- ◇ The water line coming into your house does not have a meter.
- ◇ Your neighbors have a septic system.

You can find your system by:

- ◇ Looking on the detailed plot plans for your home.
- ◇ Checking your yard for lids or manhole covers.
- ◇ Using an inspector/pumper, who can also help you find exactly where the system is located.



IS MY ATU WORKING PROPERLY?

Warning signs of system problems:

1. There are sewage odors, persistent wet spots and/or lush green growth in areas of your system.
2. Alarms or lights going off.
3. Excessive solids, foam, or scum in the unit.
4. Your waste plumbing becomes sluggish.
5. Any changes in the system's normal operating sound.

WHAT IF MY SYSTEM OVERFLOWS OR HAS MAINTENANCE ISSUES?

ANY DISCHARGE OF SEWAGE MUST BE STOPPED IMMEDIATELY AND PROPERLY DISINFECTED. CONTACT A QUALIFIED SERVICE PROVIDER FOR EVALUATION AND REPAIRS.

HOW DO I MAINTAIN MY SYSTEM?

The most important step in maintaining a trouble-free alternative treatment system is to follow the engineered design guidelines and manufacturer's recommendations. You should also keep a copy of your approved documents and plans for your system. It is required that an authorized service provider maintain your system on an annual basis. Most service providers offer maintenance two times per year based on:

- ◇ size of the tank/system
- ◇ kinds of wastewater discharging appliances you use
- ◇ type of system or filters you use
- ◇ occupancy usage

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STEP 1 - MINIMIZE THE LIQUID LOAD

The amount of waste water being treated is based on the engineering design and occupancy.

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STEP 2 - MINIMIZE THE SOLIDS LOAD

Do not use your system for anything that can be disposed of some other way.

- ◇ Avoid using the garbage disposal unit.
- ◇ Reduce the amount of grease, fats, and solids entering the system. Do not flush products such as diapers, feminine hygiene products, kitty litter, cigarette butts or coffee grounds

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STEP 3 - PROTECT THE INSTALLED SYSTEM

- ◇ Do not plant large trees over the absorption field.
- ◇ Do not allow water to pond over absorption field.
- ◇ Do not park or drive on your absorption field.
- ◇ Keep absorption fields in an uncovered open sunny area to provide maximum transpiration.
- ◇ Use of commercial additives are usually not needed or recommended.