



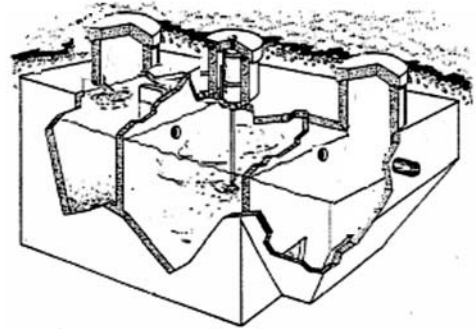
**Licking County Health Department**  
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(740) 349-6535, [www.lickingcohealth.org](http://www.lickingcohealth.org)

## Aerobic Treatment Units

Many homes in areas inaccessible to sanitary sewers treat the wastewater generated in the home with an aerobic treatment unit (ATU). These devices introduce oxygen into the wastewater allowing aerobic bacteria to digest the waste (sewage).

These units consist of:

- A tank, which may be concrete, fiberglass, or plastic
- An aerator motor and or pump which mixes air into the wastewater
- A control unit, which may include a timer, circuit breaker, and relay



They may also include filters (internal or external), chlorinators, de-chlorinators, alarms, or lift pumps.

The treated wastewater from ATU's was often discharged to streams, ditches, and tiles. This discharge, along with the high maintenance requirements, has led to the pollution of waterways from poorly maintained ATU's.

In more recent years the discharge from these units has been further treated by passing through a sand filter. This filter will eventually plug with solids if the unit is not operated properly. Presently ATU's are rarely allowed to discharge wastewater off of the lot. Disposal is by soil absorption utilizing leaching tile fields or mound systems.

### Advantages

- Can provide a higher level of treatment than a septic tank
- Helps protect valuable water resources where septic systems are failing
- Provides an alternative for sites not suited for septic systems
- May extend the life of a drainfield
- May allow for a reduction in drainfield size
- Reduces ammonia discharged to receiving waters

### Disadvantages:

- More expensive to operate than a septic system
- Requires electricity
- Includes mechanical parts that can break down
- Requires more frequent routine maintenance than a septic tank
- Subject to upsets under sudden heavy loads or when neglected
- May release more nitrates to groundwater than a septic system

## Maintenance Tips

The easiest way to provide for maintenance of your ATU is to enter into a maintenance agreement with a service contractor. For the first 2 years after the unit is installed the manufacturer is required to provide semi-annual inspections and mechanical repairs of the unit at no additional charge to the homeowner. After the 2 years have passed this service can be extended through a service contract. By having routine service conducted by a manufacturer approved technician, the system is kept working properly, and the warranty will remain in force. Unauthorized repairs to the unit may void the manufacturer's warranty on the unit.

Homeowners can perform routine inspections of the equipment.

- Listen to make sure the motor is running
- Smell – strong odors are not normal and may indicate a problem with the unit
- Look – the water leaving the tank should be clear
- Feel – the air intake for the motor or blower should have suction when the unit is running. If no air is going into the pump - then no air is getting into the tank.
- Remember – have the tank cleaned according to manufacturer's recommendations (usually at least once every 3 to 5 years)



If an aerobic treatment unit is not operating properly it may result in the discharge of wastewater including:

- ⊖ Bacteria and viruses that can cause disease
- ⊖ Excess nutrients that can pollute surface water and degrade streams
- ⊖ Offensive odors
- ⊖ Ponding polluted water is also an ideal breeding ground for mosquitoes, especially those that can carry West Nile Virus.

A listing of registered service contractors is available from the Licking County Health Department by calling (740) 349-6535, or visit our website at [www.lickingcohealth.org](http://www.lickingcohealth.org).

