Aeration System Maintenance

Tank - Have your tank pumped out at least every 4 years by a registered hauler, more frequently if needed.

Note: Use gloves when examining your aerator motor. Wash hands immediately after any maintenance is completed.

Always turn power off at the breaker before removing the motor for inspection or service.

Motor Maintenance - Unless the homeowner feels confident working with electrical motors and plumbing, it is recommended that a service contract for routine maintenance and service be obtained from the local manufacturer's representative. Any time your motor is inoperable, raw sewage is being discharged, which is considered a **PUBLIC HEALTH NUISANCE** and will degrade your system and may cause additional maintenance.

---Operation - Check your motor and timer routinely. Listen for the sound of the motor running. It is now recommended to run aeration motors continuously. If run on a timer, it should run no less than 30 minutes of every hour. A manufacturer's representative can set the timer to the proper operating cycle. When the motor is off for long periods of time, it cools and allows condensation to enter the motor housing and potentially shorten the motor life.

---Shaft – To inspect or clean the motor shaft, turn power off at the breaker, unplug the motor and lift it straight up to examine the aspirator shaft. Use care so the shaft is not bumped or bent. The stainless shaft and nozzle-like aspirator should be straight, free of hair, lint, and any debris. An aspirator nozzle is attached to the shaft bottom to provide air input and circulation as the motor rotates the shaft. Cleaning the shaft monthly will reduce stress placed on the motor and will help increase motor longevity.



---Air Intake - While the motor is running and with gloves on, place a finger on the top of the air intake tube (see picture above). You should feel suction. If there is no suction, unplug and remove the motor to check for debris inside the motor or the shaft. The shaft can be cleared by removing and cleaning the aspirator (right-hand thread) and using a water hose or a long rod to clear obstructions. If required, the shaft can be removed by loosening the 2 lowest Allen screws below the motor housing to make removing debris easier. If no debris or blockage is found, and there is still no suction, the motor may need service.

Aeration System Maintenance (continued)

Motor maintenance continued... Gast brand motors (below) have an air filter that should be cleaned or replaced periodically. Check that hose connections are secure and verify that air is reaching the tank when the pump is running.



Filters - Pumping and cleaning a Jet up flow filter (a large, rectangular lid, if present) is recommended every six months. Rake the gravel while hosing down the filter with a hose to break up accumulated biological growth. This liquid should be pumped back into the aeration tank.

The nylon mesh filter on a Norweco Singulair, if present, is located in the third compartment and should be cleaned on a regular basis.

Unless the homeowner is familiar with these procedures, they are best performed by licensed service personnel for that system.

<u>Chlorination</u> – If present, tablets should be placed in the tubes periodically. Use ONLY <u>calcium hypochlorite</u> tablets designed for sewage treatment, NOT pool chlorine tablets.

Risers - All compartments should have watertight risers properly installed above the ground surface to prevent soil and surface water from entering the system. Risers will allow your system to be easily accessed for service and inspections. Your system will have to be pumped more frequently if soil is allowed to enter. Soil influx can damage the aerator motor, clog the filter, or even create a blockage in the effluent line. **Access** - Any shrubbery and/or vegetation around the aerobic system must be maintained to accommodate routine system maintenance and inspection.

Discharge

a) - Aerobic systems that discharge to surface water drainage must have outlets that are accessible for inspection. The outlet pipe needs to flow freely. Ideally, there should be 6 inches between the bottom of the discharge pipe and the receiving waterway. The receiving waterway should be maintained so that discharged water keeps moving away.

b). Aerobic systems with leaching typically have two sets of leach lines. A square (sometimes round, plastic) distribution box provides switching between each set of leach lines using a PVC 90° elbow (or a paddle on plastic risers). The elbow should be switched every six months. This allows one set of leach lines to rest while the other accepts the system effluent.



A typical distribution box

Children and pets should be kept away from the system discharge area.

If you have any questions, please call:

Environmental Division (740) 652-2813