

# What is an Aerobic Treatment Plant

A component of your private sewage disposal system is a mechanical wastewater treatment plant, which breaks down solids and aerates human and domestic wastes. This aerobic plant treats sewage, which is then directed to another part of your system.

## Disposal Methods

Once the treated sewage leaves the aerobic treatment plant, there are different options for disposal.

- Septic Field
- Effluent Receiving Trench
- Evaporation Bed

## Septic Field

Wastewater from the aerobic treatment plant flows into a buried system of trenches call the septic field. Septic trenches are typically 18 inches to 30 inches deep. Once in the septic trenches, the wastewater is absorbed by the surrounding soil.

## Effluent Receiving Trench

Prior to discharge, the sewage may pass through a receiving trench, which resembles a conventional septic field trench except that there is a final outfall to the ground surface. The idea of the effluent receiving trench is that, even in soil around the trench that is not able to absorb the sewage very well, at least some of the sewage will soak into the ground on its way to final discharge. This helps minimize the amount of treated sewage that ends up discharging to the ground surface.

## Evaporation Bed

In some cases, the final discharge point is a shallow pit filled with gravel to the ground surface called an evaporation bed. An evaporation bed is usually small. Despite their small size, they can dispose of all wastewater discharged into them.

## Disinfection

All aerobic treatment systems which discharge to the ground surface are equipped with a disinfection device that is designed to kill any microorganisms that somehow made it through the entire treatment process. The disinfectant most commonly used is calcium hypochlorite (chlorine).

# What to do to Keep Your Aerobic Treatment Plant Functioning Properly

Conserve water to avoid overloading the system. (Example: limiting laundry loads to two to three loads of laundry per day). Periodically check for plumbing leaks. Consider the use of low flow plumbing fixtures.

Do not flush chemicals such as paints, varnishes, thinners, waste oils, photographic solutions or pesticides into your sinks or toilets. Do not flush coffee grounds, dental floss, kitty litter, tampons, sanitary napkins, diapers, cigarette butts, condoms, fat and grease or paper towels into your sinks or toilets.

The use of a garbage disposal is not recommended.

Have your aerobic treatment plant and other components (septic tank) pumped, at an interval of every 2 to 3 years, by a licensed and registered septic pumper.

Keep electricity going to the aerobic treatment unit. It needs a continuous supply of power for the aeration system.

**Never allow** anyone to pump any component of your system to the ground surface.

## Maintenance

All sewage treatment systems require some degree of management and maintenance. Package plants are no exception. Regularly check the system to make that sure all parts of the system are functioning and in good repair. Use your owner's manual to guide your inspection.

Many package plants require periodic removal of accumulated, undigested solids. Use your inspection and manufacturer's recommendations to determine pump out intervals and the amount to be pumped.

The National Sanitation Foundation Standard 40 program provides a way for a homeowner to make sure their unit can be serviced. Those who cannot find a local maintenance provider can contact the manufacturing company for help in locating one. If the manufacturer does not respond, the homeowner can contact the testing and certification group that tested the unit for help in working with the manufacturer to find a maintenance provider.