



Septic Maintenance

Operation & Maintenance Recommendations

THE HOME OWNER IS RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE ON-SITE WASTEWATER TREATMENT FACILITY (OSWTF), also known as the septic system.

The On-Site Wastewater Treatment Facility (OSWTF) consists of two components: the septic tank and the disposal field. Occasionally there are additional treatment components for other specific purposes for which an Operation and Maintenance Agreement should have been established and followed accordingly.

The tank itself is concrete. The tanks are sized according to a formula using the number of plumbing fixture units and/or bedrooms to determine the daily design flow that represents the gallons of wastewater the OSWTF must treat. The disposal field consists of trenches, drilled pits or other approved methods of water application to the soil. The size of the disposal field is determined by the soils absorption rate and the daily design flow.

A major advantage of the septic tank is that it has no moving parts and therefore needs very little routine maintenance. The maintenance that is required is to clean the effluent filter regularly, at least once a year and to pump the entire septic tank every three (3) to five (5) years. The pumping must be done by a licensed, professional pumping company to remove all contents from all compartments of the tank(s).

DO:

Schedule: Set up a regular schedule to clean the effluent filter and have the tank inspected and pumped.

1. To clean the filter, remove it from the outlet end of the tank, and hose off all accumulated solids back into the tank. Re-install the filter! It is most important to utilize the filter as it is the last protection for the disposal field and is easier to clean than to construct a "new" disposal field.
2. Inspection of the sludge and scum accumulation is the only way to determine when a tank needs to be pumped. When a tank is inspected, the depth of sludge and scum layers should be measured near the outlet baffle and recorded.
 - To determine the thickness of the scum layer, gently break the scum until a clear space can be seen. This should reveal the thickness of the scum.
 - To determine the depth of the sludge layer, insert a clear plastic tube from the top of

the tank down to the bottom floor through the scum and sludge layers. If the scum layer is too hard to penetrate, break a hole through it with a shovel. Otherwise, just insert a tube down through the scum and water into the sludge, cap the open (top) end of the tube and remove it to check the depth of the sludge. (As if inserting a straw into a glass of water, putting your thumb over the end of the straw and removing it from the drink with the water still in the straw).

- The septic tank should be pumped whenever:
 - a. The bottom of the scum layer is within three (3) inches of the bottom of the outlet device
OR
 - b. The sludge layer is within eight (8) inches of the bottom of the outlet device. The efficiency of suspended solids removal may start to decrease when these conditions are reached.

Maintain: Records of the maintenance performed on the system should be kept together with the permit, as-built plan of the OSWTF and other pertinent documents. These records must be passed on to subsequent homeowners if the property changes ownership.

- The septic tank shall be pumped at the time of the sale of the residence or shall be certified by the homeowner that the tank was inspected and pumping is not necessary, based on the depth of the sludge and thickness of the scum layers. Pumping receipt records or inspection records shall be kept by the homeowner for verification. For additional requirements regarding OSWTF inspections for permits issued under the Aquifer Protection Permit Rule, see Transfer of Ownership below.

Dispose: Only domestic wastes should be put into the OSWTF. Large amounts of foods, oils, greases, chemicals, pesticides, solvent and paints will damage the OSWTF. Small amounts of detergents, bleaches, drain cleaner, toilet bowl deodorizers and other household chemicals will not harm the bacterial action in the OSWTF.

- **DO NOT overload the OSWTF system.** Repair all leaking faucets and toilets and do not put an excessive amount of liquid through the OSWTF. Overloading the system will result in inadequate retention time and treatment of solids in the septic tank, which will carry over into the disposal field and clog the field. This could result in expensive repair or replacement costs.
- **DO NOT use a garbage grinder:** Use the trash can. The tank and filter will require more frequent cleaning. A better solution would be to compost, incinerate, or put all organic material into the garbage.
- **DO NOT dispose of the following items down sinks or toilets:** Coffee grounds, cooking fats, lard, wet strength towels, disposable diapers, facial tissues, cigarette butts, sanitary napkins, tampon applicators, prophylactics or any other materials that do not break down quickly and naturally.
- **DO NOT use a "starter":** It is not needed to begin bacterial action. The naturally occurring enzymes and bacteria present in domestic sewage waste will begin to digest the solids automatically.
- **DO NOT use corrosive chemicals:** Peroxide, sulfuric acid and other trade-named products may dissolve the material in the tank and allow it to flow into the disposal field, which can cause more harm than good. These materials are detrimental to the system as they destroy the bacterial action that is necessary for filtration, which is the removal of pathogens and organic solids.
- **DO NOT construct anything that will cover the disposal field.** This includes,

but is not limited to buildings, garages, swimming pools, patios, etc. Construction over the disposal field will impede the performance of the OSWTF.

- **DO NOT drive over the disposal field.** Driving over the disposal field will impede the performance or damage the components of the OSWTF. Driving over the septic tank is not recommended unless the tank has a reinforced lid and the risers (if applicable) are strong enough to withstand the load.

Transfer of Ownership: *Which OSWTF's do these inspections and filing requirements apply to?*

This requirement applies at the time of ownership change to any property serviced by an On-Site Wastewater Treatment Facility approved for use on or after January 1, 2001 by the Arizona Department of Environmental Quality (ADEQ) or a delegated county agency. [Arizona Administrative Code (A.A.C.) R18-9-A301(D)(2)(c); R18-9-A304; R18-9-A316]. The requirement applies to any type of transfer of ownership, such as a property sale or grant, change of ownership of a holding company, etc. All related documents and fees must be filed with the delegated authority, in this case Maricopa County Environmental Services Department, 1001 North Central Ave, Suite 150, Phoenix, Arizona 85004-1940, within 15 days after the date of ownership change.

For complete details on the regulations, who is licensed to perform these inspections and what inspection forms to use go to:

www.azdeq.gov/environ/water/permits/wastewater.html#new

OR call Arizona Department of Environmental Quality at 602-771-2300