

You are now a septic system owner! So now what?

As the owner, it is your responsibility to maintain the system at this property. This document will help you understand how your system works and give you advice on good operation and maintenance practices. As a result, you will extend the performance and the life of your system and prevent costly repairs, while protecting yourself and the environment.

How It Works

A septic system uses natural processes to treat and recycle the wastewater from your home. The system typically consists of a septic tank and a drainfield.

SEPTIC TANK

All sewage will first collect in the septic tank. The septic tank is the first step of treatment and over time gravity will allow the sewage to separate into three layers:

- **Scum layer:** This layer is composed of soaps, fats, greases, toilet paper, etc. and floats on top of the liquid layer.
- **Liquid layer:** Liquids and suspended solids will compose the middle layer.
- **Sludge:** Heavy particles will settle to the bottom of the tank.

Bacteria in the tank will start to break down organic materials and prepare the wastewater for treatment in the drainfield.

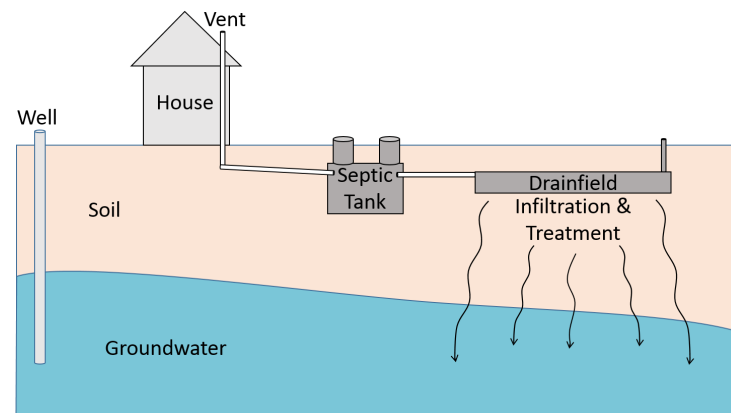
Only the liquid layer, or effluent, should leave the tank and go to the drainfield. As the effluent leaves the tank, it will pass through an effluent screen, which will prevent some suspended solids from entering the drainfield.

DRAINFIELD

The drainfield is where final treatment of the wastewater will take place. Bacteria that are naturally present in the soil will destroy disease-causing bacteria and remove nutrients as the water infiltrates through the soil.

These helpful bacteria need air to survive and different styles of drainfields are available to provide these bacteria with the oxygen they need to treat the water. The type of drainfield you have will depend on the site and soil characteristics at your property.

Inspection ports may be present in your drainfield area and are beneficial when monitoring your system.



Check Your System

You or your septic system servicer can do the following items to maintain your system.

SEASONALLY

- Check your water fixtures for leaks and repair.
- Check for wet or spongy soil in your drainfield area.
- Call your servicer if your alarm signals. (if applicable)
- Clean your effluent screen.

ANNUALLY

- Monitor your water usage rates.
- Inspect caps and lids and fix or replace ones that are damaged.
- Review pumping records. Do you need your tank pumped?

Conserve Water

The following water conservation tips can help lower your water bill and prevent overloading your system with more water than it can handle.



- **SHOWERS AND BATHS.** Take shorter showers or baths with a partially filled tub. Be cautious about excessive use of large soaking tubs.

- **WATER FIXTURES.** When updating faucets, showerheads, toilets, dishwashers, or washing machines, choose high-efficiency models.



- **RUNNING WATER.** Don't let the water run unnecessarily while brushing teeth or washing hands, food, or dishes.

- **FULL LOADS.** Wait until you have a full load to run the dishwasher or washing machine.



- **LAUNDRY.** Spread out doing laundry over multiple days a week.
- **MULTIPLE USE.** When possible, avoid showering and bathing when the dishwasher or washing machine is in use.

Signs Of Failure

- Sewage back up in the house.
- Sewage on the ground surface in the yard.
- Sewage odors indoors or outdoors.
- High levels of coliform bacteria or nitrates in well water.

Don't Put These Items Down The Drain

Many items can cause harm to your system if flushed down the drain. Food wastes and personal care products don't break down in a septic tank and increase the need for tank pumping and are likely to clog pipes. Chemicals and toxins can destroy the bacteria that are needed for a properly functioning system. Never put the following items in your system:

FOOD WASTES

- Coffee grounds or tea bags
- Animal bones or egg shells
- Fruit peels, rinds, or seeds
- Cooking oil or grease
- Gum

PERSONAL CARE & OTHER PRODUCTS

- Dental floss, cotton swabs, or hair
- Feminine hygiene products, condoms, or diapers
- Paper towels or wet wipes
- Cigarette butts or chewing tobacco
- Cat litter
- Lint

CHEMICALS & TOXINS

- Excessive amounts of household chemicals
- Antibacterial soap
- Automotive fluids
- Pesticides, herbicides, or fertilizers
- Oil-based paint
- Medications



Additives

Many product additives claim to improve your septic system but most do more harm than good. The sewage going into the septic tank provides the bacteria necessary to break down the sewage and they do not need to be 'fed' additional bacteria, enzymes, or yeast.

Many of the additives that claim to clean or break down solids in the tank are probably causing damage to the drainfield area. Additives do not get rid of the need for having your tank pumped and can lead to the need for drainfield replacement.

Recordkeeping



Having records of what has been done to the system can be very valuable if there is ever a problem with the system in the future. If the property is sold, give these records to the new property owner. Keep a record of the following:

- System layout and size
- System manuals
- Pumping & other maintenance records
- Inspection reports
- Contact info for the installer and pumper

Tank & Pump Care

INSPECT AND PUMP FREQUENTLY. It is recommended that the tank be pumped at least every 3 years by a ND licensed septic servicer. The frequency between pump outs can change over time and will depend on how many people use the system regularly, how much wastewater is generated, the volume of solids in the wastewater, and the septic tank size. If your system has a pump, it may need to be inspected more frequently to ensure everything is operating properly. Having a high water alarm installed is recommended for holding tanks and systems with pumps to prevent backups.

MAINTAIN EFFLUENT SCREEN REGULARLY. Cleaning your screen twice a year or replacing it annually is recommended. Using a screen is one of the most affordable and easiest ways to prevent your drainfield from clogging.

CHECK FOR AND REPAIR LEAKS. Small drips can add multiple gallons of water to your system every day. Leaky fixtures will increase your water bill, waste natural resources, and overload your system.

KEEP LIDS SECURE AND ACCESSIBLE. When not being inspected or maintained, all access points should remain closed to prevent accidental entry, especially by children and pets. If your tank lid is buried, bring the riser to the surface. This will prevent having to dig up your yard every time your tank needs to be pumped and allows easy access to the tank, especially in the winter.

DO NOT ENTER THE TANK. The tank has low oxygen levels and can contain dangerous gases.

Drainfield Care

VEHICLE TRAFFIC. Do not drive or park vehicles or equipment on any part of your septic system. Doing so can damage pipes, tanks, and other components. Driving over the drainfield will also compact the soil making it difficult for water to pass through and be treated.

DIVERT EXTRA WATER. Direct roof drains, sump pump lines, footing drains, and other rainwater or surface water away from the drainfield. Excess water can slow down the system and lead to back ups.

VEGETATIVE COVER. Plant only shallow-rooted grasses or flowers over your drainfield; avoid deep-rooted plants, shrubs, vegetables, and water-seeking trees. Vegetation will help reduce erosion of the drainfield and will help insulate the system.

Spring Care

- Divert snow melt away from your system so it doesn't collect or run across your drainfield.
- After the ground has thawed and is dry, rake any mulch off of the system.
- Check the drainfield area for areas that stay wet or have standing water.
- Inspect your drainfield for burrowing pests. Remove the pests and fill in any access holes near the system.
- Have a licensed installer repair any damage from freezing and consider adding insulation to problem areas.

Fall & Winter Care

VEGETATIVE COVER. Let the grass over the drainfield grow longer in the fall. It will trap more snow and provide insulation. If grass is not yet established, add 8 to 12 inches of mulch over the pipes, tank, and drainfield to help provide insulation.

USE WATER. Regularly use water, the warmer the better.

DO NOT LEAVE WATER RUNNING. Do not leave water running all the time to prevent freezing. A slow stream is likely to freeze and a steady stream could overload the system with water.

ADDITIVES. Do not add automotive antifreeze to the system.

PLAN BEFORE LEAVING. If you plan to be gone for more than a couple of days, have someone visit and use water. If you will be gone for weeks or months, it may be better to have your tank pumped before leaving.

CHECK FOR AND REPAIR LEAKS. Slow drips can freeze inside the pipes and eventually build up and plug the pipe.

TRAFFIC. Keep all vehicles (including ATV's and snowmobiles) off the system.

ACCESS. Keep tank lids above the ground surface.

**Additional information
can be found at
www.fdh.org or call us
at 701-852-1376**

Septic System Owner's Guide

First District



Health Unit

First District Health Unit

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