

## THE CARE AND MAINTENANCE OF YOUR SEPTIC SYSTEM

So, you are the proud new owner of a septic tank and drainfield. Many homeowners do not know or care how their on-site sewage treatment system works, they just want to flush and forget. Unfortunately, what a homeowner doesn't know about their system could potentially cost them a lot of money in the future.

To understand how to maintain the life of your septic tank and drainfield you need to understand the basics of how that system works. A standard septic system is comprised of a septic tank, a distribution device, and the drainfield. The septic tank itself is made of concrete, plastic, or fiberglass. The size required is determined by the number of bedrooms in a house, with 1000 gallon being the minimum size. Tanks must be water-tight so that ground water does not seep in and sewage seep out of the tank. Because tanks need to be pumped periodically, a riser extends to the surface of the ground to provide access to the tank. The purpose of the septic tank is to allow heavy particles to settle to the bottom and allow fats and oils to rise to the top. The liquid (effluent) leaving the tank then flows to the drainfield. Keep in mind that septic tanks provide very minimal treatment-they are not intended as a complete treatment system.

Also required in the septic tank is an effluent filter. This filter serves to keep large particles from leaving the tank and clogging the drainfield. Effluent filters will extend the life of your drainfield.

Once the effluent leaves the septic tank it flows to a distribution device. This device assures that each lateral in the drainfield receives the same amount of effluent. Drainfield are designed according to the results of the soil morphology. Soil morphologies give us valuable information on what type of soil is in the area, how much water that soil is capable of absorbing, and the distance to bedrock. . The drainfield itself consists of trenches filled with washed rock with perforated 4" PVC pipe. In this area gravelless pipe or chambers are used instead of pipe and rock, as washed rock is not readily available. The drainfield is where the real treatment of wastewater takes place. Microbes in the soil digest the nutrients from the wastewater and the soil filters the wastewater thus cleansing and purifying the water before it re-enters the groundwater. **Drainfield are not allowed to have "overflow" pipes. Overflow pipes allow untreated, contaminated sewage to flow into surface waters, causing pollution of the surface supplies.**

Regular maintenance of an on-site sewage system is the best way to prevent system failure. Simple maintenance can significantly extend the life span of a system. The following are guidelines for system maintenance:

- Conserve water. Water usage should be staggered to prevent flooding of the system. For example, instead of doing 6 loads of laundry on Saturday, do one load per day. Use water saving fixtures such as low flow shower heads and toilets can greatly cut down water usage. Also, make sure that any water leaks are repaired immediately.

- Your sewage system is not a trash can. Keep chemicals such as paint, paint thinner and pesticides out of the system. Discard non-degradable items such as disposable diapers, sanitary napkins, cigarette butts etc. out of the system.
- Restrict the use of the garbage disposal. This introduces excess solids into the tank and can cause sludge to build up much faster. Vegetable and fruit wastes can be disposed of in trash or in a compost pile.
- Grease and oil clog drain fields. Do not pour them down the sink.
- Check your tank yearly to determine if it needs to be pumped. Most tanks need to be pumped out every 3-5 years. Keep records of pumping and other maintenance. If you know where your drainfield is located, keep a sketch of it for future reference. This is especially useful when selling your home.
- Clean the filter yearly, or as needed. Hose it off into the tank and reinsert.
- Do not use septic tank additives. Although adding yeast will not harm the system, it is not necessary. Chemical additives cause large particles to become suspended and get into the drainfield where the large particles clog soil pores. This leads to drainfield clogging and failure.
- Cover the drainfield with grass, not concrete, asphalt, or other hard surfaces. Grass helps to prevent erosion and remove excess water.
- **DO NOT DRIVE OVER THE DRAINFIELD.** This will compact the soil and can lead to failure.
- Keep surface water away from the tank and drainfield. This includes downspouts from roof gutters, foundation drains, and sump pump discharge.
- Do not disturb the drainfield area or the set aside repair area.

Taking a few preventative measures can save you thousands of dollars in repairs. For questions about your on-site sewage system contact the Randolph County Health Department at 660-263-6643.