

Onsite Septic System Frequently Asked Questions

How do I locate my septic system? How can I learn more about my property's septic system?

First, contact Environmental Health at the Henrico County Health Department at (804) 501-4530. An Environmental Health Specialist can help you determine if you have a septic system or if your property is served by public sewer. If your property is served by a septic system, the Henrico County Health Department can help you find records that detail your specific septic system.

What happens when a septic system fails? How can I tell?

Typically when a septic system fails, the effluent (sewage) will back up in the plumbing fixtures of your home which may cause gurgling noises and/or slow drains. Or the effluent might break out on the ground surface above or adjacent to the septic system causing wet soft spots in the yard and/or black staining on the ground surface.

How can I prevent a septic failure?

Proper operation and regular maintenance are the keys to preventing septic system failure.

- **OPERATION:** The only thing to enter your septic system should be waste from the plumbing fixtures of your home. This includes toilets, showers, laundry, sinks, and the like. Items such as cat litter, hair, tissues, cigarette butts, feminine hygiene products, condoms, diapers, paper towels, and disposable wipes should NOT be flushed down the toilets.
- **MAINTENANCE:** Visit this website for information regarding the Henrico County Public Works Septic System Pump Out/Inspection Program: [Henrico Co. Public Works Pump Out/Inspection Program](#)

For additional information about operation and maintenance of septic systems, visit EPA's "System Maintenance" page. http://www.epa.gov/owm/septic/pubs/homeowner_guide_long.pdf

How long do septic systems last?

Septic systems are designed to provide long-term, effective treatment of household wastewater when operated and maintained properly. Many factors play a part in how long your septic system will function properly. How much water is used in the house, what materials are washed/flushed down the drain, the type of soils in the drainfield area, and frequency of maintenance are all major factors in the lifespan of a septic system. Typically septic systems don't go from working fine one day and then failing the next. It is usually a gradual process that may take several years. Many septic systems will go through what is referred to as "Seasonal Failure." During the "dry" time of year (summer and fall) the septic system may work normally but during the "wet" time of year (winter and spring) the septic system may act up and exhibit the symptoms of failure mentioned above. Eventually the septic system will begin to fail year round if not repaired.

My septic system is failing, now what?

Contact the Henrico County Health Department. We are here to answer your questions and hopefully help you solve the problem as quickly as possible. The first step is to submit an application for repair to our office. We do not charge a fee for a repair application. Once we have the application we will do a records search to see what the history of the property tells us. Then we will conduct an evaluation of the existing septic system and



a soil evaluation. Once we gather as much information as possible about current situation we will discuss with you the possible options for repair. Sometimes we discover that a relatively simple repair can restore the existing system to working order. Other times the drainfields maybe completely clogged and complete replacement is called for or perhaps an entirely new system is required. We realize that replacing a septic system can be a daunting and expensive problem. It is our sincere desire help guide you through this process and to reach a safe and environmentally sound solution.

Can my septic system contaminate my well and nearby streams and water bodies?

Yes, particularly if the effluent is not adequately treated (as in a failing septic system). Untreated effluent is a health hazard and can cause many human diseases. Once this untreated effluent enters the groundwater, your well and other nearby wells can become contaminated. Also, if this sewage reaches nearby streams/water bodies, shellfish beds and recreational swimming areas may also be jeopardized.

What can I plant over my drainfield and septic system?

Grass is the ideal cover for drainfields. Grasses can be mowed in a traditional lawn or in an un-mowed meadow. If you plan to landscape around/over the septic tank, you should plan for access to the tank so that plantings won't have to be removed when tank maintenance is required.

How close can trees and shrubs be to the drainfield?

Trees and shrubs generally have extensive root systems that seek out and grow into wet areas, such as drainfields. As a result, trees and large shrubs should be kept at least 30 feet away from your drainfield, and may require greater setbacks depending on the root structure and soil type. If you wish to plant trees near a drainfield, consult an expert who can determine types of plants and distances, based on your property's soil type.

Can I plant a vegetable garden over my drainfield?

No. Growing vegetables over a drainfield is not recommended. Vegetables need watering, and excess water in the soil reduces its ability to treat wastewater. The deep roots of some vegetables may damage drainfield pipes. Bed preparation, such as roto-tilling or deep digging, can also damage pipes. Plus, there is the risk of contaminating food crops with sewage.

What about landscape plastic or fabric under mulch, can that be placed over the drainfield?

No. Plastic reduces the necessary air exchange in the drainfield soil. Even mulch or bark over the drainfield is not recommended, because it reduces air exchange and retains water.



Why is water conservation important?

The first component to your septic system is the septic tank. The main function of a septic tank is to act as a settling chamber. The septic tank allows time for the sludge and scum to separate out from the wastewater and then the septic effluent can pass through to the drainfield. If very large amounts of water are used in the house then this reduces the time for settling in the tank and more solids will get flushed into the drainfields. This can lead to clogging of the drainfields which shortens their useful lifespan. The use of ‘water-saver’ appliances and fixtures in the house can greatly reduce the amount of waste water that the septic system has to process and thereby increase the useful life span of the septic system. It is also important to routinely check the plumbing fixtures of your home to make sure there are no leaking faucets or fixtures. The additional water from one or more leaking faucets can add up quickly and contribute to septic system failure.

I’ve heard I shouldn’t use a garbage disposal. Why is that?

Garbage disposals have a dramatic impact on how often you’ll need to pump your septic tank. Food debris such as egg shells, coffee grounds, peels, etc. are not easily digested by the bacteria in a septic tank. Therefore the scum and sludge layers build up much faster which requires more frequent pump outs of the tank. Without frequent maintenance the sludge and scum may push through the septic tank and proceed into the drainfields. This causes clogging of the soil in the drainfield which causes the septic system to fail. In addition, the food debris that is digested by bacteria increases the amount of dissolve solids in the waste water. This basically increases the strength of the waste water that leaves the septic tank. This stronger effluent is more difficult for the drainfields to treat and disperse which can also lead to system failure. The Henrico County Health Department recommends that garbage disposal systems not be used in homes served by a septic system.

Should I be careful of what I pour down the drain?

Yes, many materials that are poured down the drain do not decompose and remain in the tank. Don’t pour grease, fats, and oils down the drain. Keep chemicals like paints, cleaners, solvents, and petroleum products out of your system. For more information, visit EPA’s “System Maintenance” page: http://www.epa.gov/owm/septic/pubs/homeowner_guide_long.pdf.

What shouldn’t I flush down the toilet?

Flush only human waste and toilet paper down the toilet—avoid flushing dental floss, cat litter (including “flushable” varieties), hair, Kleenex, cigarette butts, cotton swabs, feminine hygiene products,

condoms, paper towels, static cling sheets, diapers, and disposable wipes. These items could clog your septic system components and cause a failure.

Will additives help my system?

No. Adding a stimulator or an enhancer to a septic tank to help it function or “to restore bacterial balance” is not necessary. The naturally occurring bacteria needed for the septic system to work are already present in human feces. According to the U.S. Department of Health, none of these products eliminate the need for routine maintenance and pumping.

What is the replacement or reserve area? And is it required?

The reserve area is an area that has been set aside should the existing drainfield need to be expanded or replaced. The reserve area should be left relatively undisturbed and additional improvements to the property (swimming pools, sheds, garages, etc...) are prohibited in the reserve area. When and if the original septic system fails, the actual design of the replacement septic system will be dependent on the regulations in effect at the time of the failure. Since the Chesapeake Bay Protection Act was passed in 1988 all properties in the watershed that use an Onsite Sewage Disposal System must provide a 100% reserve area for future repair to the septic system. Henrico County falls entirely within the Chesapeake Bay Watershed; therefore, a 100% reserve area is required for all new construction utilizing a septic system.

Rainwater is directed onto my drainfield, is this a problem?

Yes. Downspouts and storm water from impervious surfaces (such as roofs, driveways, and patios) should be diverted off the septic tank and drainfield. A small swale uphill from a drainfield can help direct water away.

I've been in my house for 18 years and never pumped my septic tank. Why should I be concerned?

Over time, sludge and scum build up in the septic tank and unless it is removed it will eventually build up enough that it overcomes the baffles in the septic tank. If sludge and scum get into the drainfield it will begin to clog up the soil preventing water dispersal which leads to a shorter lifespan and eventually system failure. Once a drainfield is clogged, it must be replaced, which is an expensive repair. When this occurs sewage may back up into the house and/or rise to the ground surface.

Can you tell if the tank needs pumping without digging it up?

Unless you have risers installed, you will need to dig up the ground above the septic tank to inspect it. Risers give easy access to the septic system without disturbing the soil above the tank. By keeping maintenance records, you can have it pumped on a routine schedule, based on the previous years' rate of solids accumulation.

Who do I call to inspect and/or pump my septic system?

Contact the health department or health district for a list of licensed contractors in your area.

How often should I have the tank pumped?

How often you need to pump depends on the size of the tank, the number of people in the household, and the amount and type of solids. A septic tank should be inspected annually to check for needed repairs and pumped as needed, usually every 3 to 5 years. Some alternative systems that are more complex may need pumping more frequently. If you are unsure if your tank needs pumping, have it inspected by a licensed Operation and Maintenance Provider and get a recommendation for how many

years you can go between pumping. Write this schedule down on a maintenance chart or where you keep your maintenance records and stick to it! Also, visit this website for information regarding the Henrico County Public Works Septic System Pump Out/Inspection Program: [Henrico Co. Public Works Pump Out/Inspection Program](#)

What is an Alternative Onsite Sewage System (AOSS)?

An AOSS is a septic system that provides a higher level of sewage treatment than a “conventional” septic system. This higher level of treatment will essentially reduce the amount of harmful bacteria, nutrients, and organic matter in the sewage. Most AOSSs consist of a pretreatment element (i.e. oxygenation of the sewage) and a filtering media (i.e. gravel, peat, etc.).

Why is an AOSS required for my property?

There are multiple reasons why an AOSS might be required for your property. These reasons might include:

1. Limited depth to groundwater, restrictive layer, or other limiting feature
2. Limited square footage of suitable soil
3. Soil type (i.e. texture, structure, etc.)

If your property had any of the above listed issues, the sewage from a “conventional” septic system could potentially contaminate the ground or surface water and pose a threat to public health. An AOSS will treat the sewage so it is much less harmful before reaching ground or surface water.

Are there special requirements for the operation of my AOSS?

Yes. As the owner of a property utilizing an AOSS, it is your responsibility to:

1. Have the AOSS operated and maintained by an operator;
2. Have an operator visit the AOSS at the frequency required by the [Regulations](#);
3. Have an operator collect any samples required by the [Regulations](#);
4. Keep a copy of the log provided by the operator on the property when the AOSS is located in electronic or hard copy form, make the log available to the Health Department upon request, and make a reasonable effort to transfer the log to any future owner;
5. Follow the Operation and Maintenance (O&M) manual and keep a copy of the O&M manual in electronic or hard copy form for the AOSS on the property where the AOSS is located, make the O&M manual available to the Health Department upon request, and make reasonable effort to transfer the O&M manual to any future owner; and
6. Comply with the onsite sewage system requirements contained in local ordinances adopted pursuant to the Chesapeake Bay Preservation Act and the Chesapeake Bay Preservation Area Designation and Management Regulations when the AOSS is located within a Chesapeake Bay Preservation Area.

How often do I have to have my AOSS checked by an operator?

Residential AOSSs that are designed for $\leq 1,000$ gallons per day require an initial visit within 180 calendar days of issuance of the Operation Permit. After the initial visit, an annual visit is required.

How do I find an operator to check my AOSS?

An AOSS operator must be licensed as an Onsite Sewage System Operator by the Department of Professional and Occupational Regulations’ (DPOR’s) Board for Waterworks and Wastewater Works Operators and Onsite Sewage Professionals (WWWOOSP). For a list of locally-based licensed operators, contact Environmental Health at the Henrico County Health Department at (804) 501-4530.

What do I need to know about my AOSS? And where can I find more information?

The easiest place to find information about your AOSS is the O&M manual. According to the [Regulations](#), your O&M manual should include:

1. Basic information on the AOSS design including treatment unit capacity, installation depth, pump operating conditions, a list of the components comprising the AOSS, a dimensioned site layout, sampling locations, and contact information for replacement parts for each unit process;
2. A list of any control functions and how to use them;
3. All operation, maintenance, sampling, and inspection schedules for the AOSS, including any requirement that exceed the minimum requirements of the [Regulations](#);
4. The performance (laboratory) data sampling and reporting schedule;
5. The limits of the AOSS design and how to operate the system within those design limits;

If you do not have a copy of the O&M manual, please obtain another copy by contacting the AOSS operator, designer, or the Henrico County Health Department.