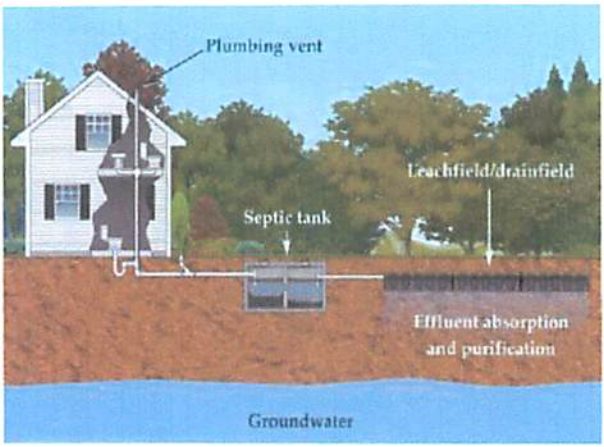
SEPTIC SYSTEM INFORMATION FOR HOMEOWNERS



Carteret County Environmental Health
3820 Bridges Street, Suite A
Morehead City NC 28557
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Protect Your Drain Field

The drainage field is an often overlooked aspect of the septic system, yet it is more important tha the tank for the proper operation of the entire system. Homeowners can take several measures to ensure their drain field is properly maintained.

- Never park vehicles or place other large objects on the drain field, as this will compact the s and reduce it ability to treat wastewater. It also may damage the network of drain pipes witl the field, causing them to need to be replaced.
- Avoid planting water-loving shrubs with deep root systems or trees near the drain field, as roots could damage the pipes, or they could change moisture levels within the soil causing i be less effective.
- Surface water from driveways, roofs and gutters should be diverted away from the tanks an the drain field, as this could keep the soil too wet, reducing its capacity to absorb the waste water and causing it to pond on the surface.
- Fill depressions in the drain field where surface water can collect. The drain field should be landscaped to allow water to run off. If the drain field is on a sloping site, surface water div sion may need to be considered.
- Keep swimming pools (above or in-ground) away from the absorption field.

It is helpful to draw a diagram of the septic system which shows the location of the house, the sep tic tank and its manholes, and the drain field. This diagram will make it easier for a qualified ma tenance worker to check and maintain the system. Sketch a diagram showing the location of you septic tank and drain field in relation to your house. Measure exact distances from at least two reference points (such as the corner of the house and a tree) if possible.

Maintenance Tips

Inside

There are many ways to prolong the life of your septic system and lengthen the period between pumpings. Household water use directly controls how quickly waste travels through a conventio system. Waste water that enters the tank requires time to allow the solids to settle to the bottom. The higher the volume of water that is introduced to the system, the less opportunity the waste water has to settle in the holding tank and the less opportunity the bacteria have to break down tl solids. Therefore, limiting the use of water in the home will go far in prolonging the life of the system.

Controlling what goes into the water that enters the system is just as important as reducing the amount of water that flows into the system.

- Conserve water. Fix leaks and drips. If you replace old fixtures, install new "low flow" typ
- Do not overload the system — this is the primary cause of system failures. Early morning a bedtime are peak water use times in the bathroom. Run dishwashers and washing machines other times of the day. Don't do all family laundry in one day.
- Do not use a garbage disposal or dump coffee grounds in the sink. Increasing the load of solids into the tank decreases the capacity and shortens the interval between pumpings.

- If septic tank does not have an effluent filter (tanks installed prior to 1999) it is recommended that one be installed. The effluent filter is installed inside the tank at the outlet pipe.
- Do not pour fats and oils down the drain which can build up and clog the septic tank pipes and drain lines.
- Put plastic, paper towels, tissue, cigarette butts, disposable diapers, sanitary napkins, tampons and other material in a trash can, not the toilet.
- Use normal amounts of detergents, bleaches, drain cleaners, household cleaners and other products.
- Avoid dumping solvents like dry cleaning fluid, pesticides, photographic chemicals, paint thinner, or auto products down the drain.
- Do not discharge backwash from water softeners and/or iron/manganese removal equipment to the septic tank or absorption system.

Don't Sink It!!!

(Kitchen sinks on onsite wastewater systems)

No Grease

Fats
Butter
Wax
Cheese
Heavy Cream

No Liquid Wastes

Pesticides
Drain Cleaners
Household Chemicals
(unless specified safe for on-site wastewater systems)
Paints
Paint Thinners
Photographic Solutions
Solvents (e.g. hobbies)
Oils

Other No's for the Sink

Coffee Grounds
Excess Food Waste

Don't Flush It!!!

(Only toilet tissue + human waste)

No Plastics/Latex

Wrappers
Feminine Product Covers
Lids/Liners/Rings
Condoms
Band-Aids

No Paper Materials

(other than toilet paper)
Baby Wipes
Paper Towels/Towelettes
Facial Tissues
Napkins
Gauze
Dental Floss
Matches
Feminine Products & Paper Covers

Other No Flush

Coffee Grounds
Cigarettes
Left over/Expired Medicines
Hair Clippings
Kitty Litter/Pet Wastes
Grease/Oils/Solvents

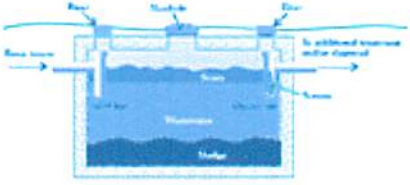
Use of Additives

Do not add "starter enzymes" or "yeast" to your system. Additives do not improve how well your system works. There are always plenty of natural bacteria available to do the job. In fact, additives can damage your system by breaking up the sludge and scum layers, causing solids to flush out of the tank and clog the infiltration bed.

Pumping

The septic tank is the chamber where settleable and floatable solids are removed and also where primary treatment occurs. Tanks need to pumped every two to five years, depending on use. If the tank gets too full, particles of scum or sludge will flush out of the tank. This material will clog the drain lines and cause the septic system to fail. Pumping your septic tank is less expensive than replacing your absorption field. If you have a garbage grinder, you should pump the septic tank annually.

Effluent Filter



Septic Tank

The effluent filter should be cleaned when the tank in pumped. It is not recommended that more than 3 years be exceeded before cleaning the effluent filter. The effluent filter can be easily cleaned by pulling it out of the tee, rinse is over the inlet side of the septic tank and replace it properly in the tee.

Number of Years for Pumping your System					
Tank Size (gallons)	**Number of people using the septic tank system**				
	1	**2**	**4**	**6**	**8**
900	11	5	2	1	1
1000	12	6	3	2	1
1250	16	8	3	2	1
1500	19	9	4	3	2

Hire a licensed professional (listed in the phone book under "septic tank cleaners") to pump the waste out of your tank. The tank should be pumped out through the manholes on both sides. The tank should be cleaned completely, leaving nothing in the tank. Make sure the baffles are inspected and that the tank is checked for leaks

Possible Signs of Trouble

- The septic tank has not been pumped out in the past five years. Even if the system appears to be working well, sludge may have built up to the point where waste water is released without sufficient time in the tank for treatment and settling of particles. This situation may result in pollution of groundwater or cause eventual clogging of the drain field.
- A wet area or standing water occurs above the drain field. This situation can develop when sludge particles clog the drain field, when tree roots or broken pipes keep the waste water from dispersing through the entire drain field, or when water use in the house regularly exceeds the design capacity of the system. When these conditions occur, waste water does not move through the soil as it should, and instead rises to the surface creating a serious health risk and odor problems.
- Toilets run slowly or backup. This can be the result of plugged sewer lines to the tank, a plugged inlet or outlet pipe, a full septic tank, a clogged effluent filter, or a failed drain field.
- Septic odors occur in the house, above the tank and drain field, or escape from the vent pipe. If the system is operating properly, there should be no odors. If there are odors, it can be an early warning sign that the system is failing.

When a septic system fails, human and environmental health may be compromised.

If a problem occurs contact your operator or the local health department for recommendations. A repair of the system will require a permit from the local health department.

Signs of a failing septic system

Alternative and Innovative Systems

Alternative or innovative onsite wastewater systems are more complex than conventional systems. They include pumps, recirculation piping, aeration, and other features that require monitoring and maintenance on a regular schedule. Owners of alternative or innovative systems are required to maintain a contract with a certified subsurface operator and possibly a certified wastewater operator for operation and maintenance of their system for as long as the systems use is required. Failure to provide proper maintenance and operation of these systems will result in premature failure, costly repairs and contamination of ground and surface waters.

Owners of these systems are provided an Operation Permit upon approval of the installation of the system. The Operation Permit clearly identifies the responsibilities of the owner and the operator and the required operation and maintenance of the approved system. Subsequent owners of the system must also be made aware of the requirement for maintaining a contract with a certified operator. The local health department can provide a copy of the Operation Permit if one is not available.

The certified operator will be required to make inspections of the onsite wastewater system at a frequency specified in the Operation Permit. The frequency is normally once every six months but can be as frequently as monthly. The inspection requirements are listed in the Operation Permit and generally include checking the septic tank and pump tank for solids, inspecting drainfields for adequate cover, surface water diversions, and surfacing effluent, purging drainlines, checking and setting floats and pressure head, checking alarm, recording readings in control panel, and performing performance measurements. Information obtained from the inspections is used to evaluate the system performance. Observation of poor performance or malfunctions allows preventative measures to be taken before serious problems occur.

The operator is required to report to the health department at a frequency specified on the Operation Permit. The operator should report to the owner after each required inspection. The local health department will perform an inspection of the system at a frequency specified by the Laws and Rules for Sewage Treatment and Disposal Systems (15A NCAC 18A .1961). The inspection frequency varies from once a year to once every five years depending on type of system.

Maintenance Records

Keep a record of maintenance on your system. It is suggested that you include who main tained the system, what was done, the date of the work, and the current status of the syste Operation and Maintenance records should also include Operation Permit, plans and spec fications, and Operator contracts, reports and correspondence.

Important Information:

Carteret County Environmental Health
3820 Bridges Street, Suite A
Morehead City NC 28557
Phone: 252-728-8499
http://www.carteretcountyhealth.com

Date of Operation Permit_____
Operation Permit #_____
Attach copies of all permits

Wastewater System Installer:

Name: _____

Address:_____

City:_____

Phone:_____

Date Installed:_____

Certified System Operator: (if applicable)

Name:_____

Address:_____

City:_____

Phone:_____

Date of Contract:_____

Expiration Date:_____

(Contracts with Certified Operators shall maintained for as long as use of system is required)

Additional information can be found at the following web sites:

US Environmental Protection Agency
http://cgpub.epa/gov.own/septic.home.cfm

National Small Flows Clearinghouse
http://www.nesc.wvu.edu.nsfc/nsfc_index.htm

NC Dept. of Environmental and & Natural Resources
Division of Environmental Health
http://ww.deh/enr.state.nc.us/osww_new//index/htm

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