

Septic System Do's and Don'ts

1. **DO** pump your septic tank once every 3 to 5 years.
2. **DO** use water efficiently to avoid overloading the system. Be sure to repair leaky faucets or toilets and use high-efficiency fixtures.
3. **DO** keep the soil over your system slightly mounded to help surface water run-off.
4. **DO** landscape properly. Dense grass cover and shallow-rooted plants are beneficial to a drainfield. Tree and shrub roots can cause damage.
5. **DO** keep all automobiles, livestock, and cement off the drainfield.
6. **DO** mark the boundaries of your drainfield as a reminder.
7. **DO** learn the location of your septic system. Keep a sketch of it with your maintenance records.
8. **DO** keep records of repairs, pumpings, inspections, permits issued, and other system maintenance activities.
9. **DO** check with the Health Department before using additives. Commercial septic tank additives do not eliminate the need for periodic pumping and can harm your system.
10. **DO** recycle household hazardous waste by contacting the St. Clair County Environmental Services Department, 6779 Smiths Creek Road, Smiths Creek, (810) 367 – 3061.
11. **DO** moderately use commercial cleaners and laundry detergents. Consider cleaning with a mild detergent or baking soda.

1. **DON'T** use chemicals to clean or "sweeten" your system, except on the advice of the Health Department.
2. **DON'T** use a kitchen garbage disposal unit. Use can add large quantities of solids requiring the need for more frequent pumping.
3. **DON'T** put toxic household wastes down the drain. Avoid fats, solvents, oils, disinfectants, paints, chemicals, pesticides, motor vehicle fluids and poisons.
4. **DON'T** drive or park vehicles on any part of your septic system. This can compact the soil in your drainfield and damage the pipes.
5. **DON'T** fertilize the soil over a drainfield.
6. **DON'T** stockpile snow or soil on your drainfield.
7. **DON'T** allow downspouts to drain onto your drainfield.
8. **DON'T** enter a septic tank chamber. Poisonous gases and the lack of oxygen can be fatal.
9. **DON'T** empty water from swimming pools or hot tubs into your septic system.
10. **DON'T** treat your system like a garbage can. Avoid dental floss, coffee grounds, cigarette butts, paper towels, and diapers.
11. **DON'T** drain your water softener or sump pump to your septic system.

Warning Signs of a Failure!



- ☠ Odors, surfacing sewage, wet spots, or lush vegetation in the drainfield area
- ☠ Plumbing or septic tank back-ups
- ☠ Slow-draining fixtures, not due to a local clogging
- ☠ Gurgling sounds in the plumbing system

When a System Fails

Do not wait for the system to fail before pumping the septic tank. Once a system fails, it is usually too late to pump the tank. **Do not** place more soil over a saturated drainfield; this does not fix the system and effluent may soon surface again. **Do not** pipe the sewage to a road ditch, storm sewer, or nearby body of water. This is illegal and creates a health hazard by polluting fishing, swimming and drinking water. **Do:**

**Contact the St. Clair County Health Department
Division of Environmental Health
(810) 987-5306**

**Hours: 8am - 4:30pm, Monday - Friday
www.stclaircounty.org/offices/health**

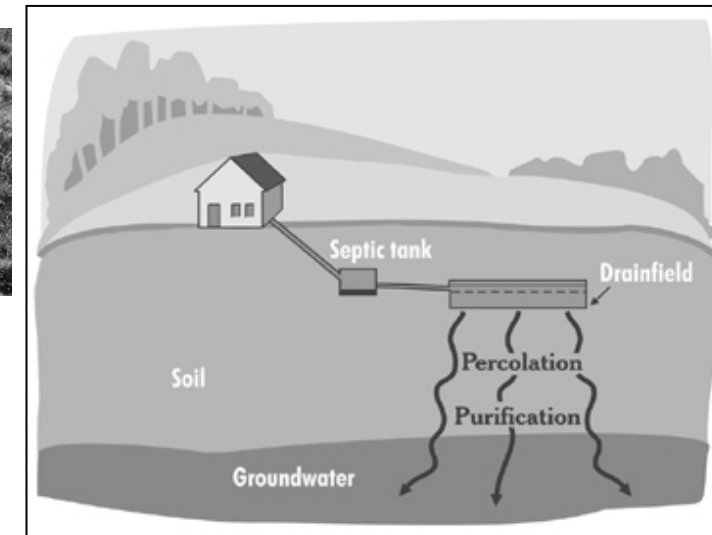


**To report an illicit discharge or illegal dumping, call:
877 - 504 - SWIM**



A Guide to Your Septic System

St. Clair County Health Department



Your septic system is your responsibility!

Households and businesses that are not served by public sewers depend on onsite wastewater treatment systems to treat and dispose of their wastewater. Wastewater treatment systems are most commonly known as *septic systems*.

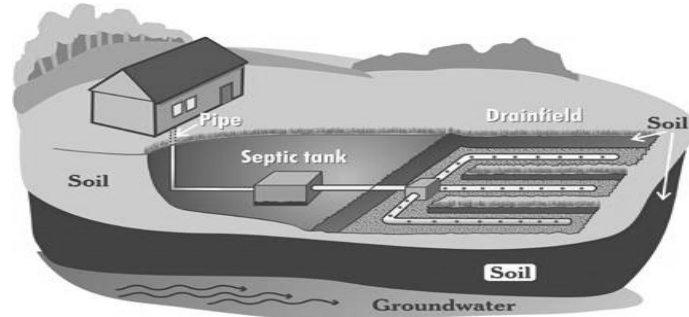
Management is the key to a lasting septic system!

Septic systems can provide safe, environmentally-sound treatment of your home or business's wastewater. However, living with a septic system requires a little more responsibility than being connected to a city sewer.

This guide provides information on septic systems and how to care for and maintain your system. It also serves as a folder in which to store vital information about your system. This should be kept with other documents about your home or business, and property.

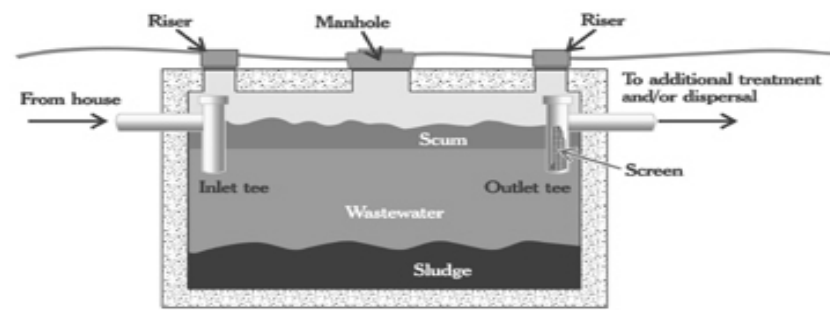
How does my system work?

A septic system has four main components: a pipe from the home or business, a septic tank, a drainfield, and the soil. Wastewater from your toilet, bath, kitchen, and laundry flows through a pipe from your house and into the septic tank. Microbes in the soil digest or remove most contaminants from the wastewater before it eventually reaches groundwater.



The Septic Tank

A septic tank is designed to intercept and hold solids contained in wastewater from your home or business. The tank is a large, buried, watertight container typically made of concrete, fiberglass, or polyethylene. It holds the wastewater long enough to allow heavy solids to settle to the bottom (forming sludge) and oil and grease to float to the surface (as scum). Solids that are not decomposed remain in the septic tank. If not removed by periodic pumping, solids will accumulate until they eventually overflow the drainfield, causing costly repairs.



Septic tanks may have one or two compartments. Two compartment tanks do a better job of settling solids and may be required for new systems. Tees or baffles are provided at the tank's inlet and outlet pipes. The inlet slows the incoming wastes and reduces disturbance of the settled sludge. The outlet keeps the solids or scum in the tank. All tanks should have accessible covers for checking the condition of the baffles and for pumping.

The Drainfield

Wastewater exits the septic tank and is discharged into the drainfield for further treatment by the soil. Generally, the drainfield has a network of perforated pipes laid in gravel-filled trenches or beds in the soil. Wastewater trickles out of the pipes, through the gravel layer, and into the soil. The size and type of drainfield depends on the estimated daily wastewater flow and soil conditions.

The soil filters effluent as it passes through the pore spaces. Microorganisms in the soil provide final treatment by removing harmful bacteria, viruses, and nutrients. After the effluent has passed into the soil, most of it percolates downward and outward, eventually reaching groundwater.

How do I maintain my system?



If properly designed, constructed, and maintained; your septic system can provide long-term, effective treatment of household wastewater.

Pump Frequently

Your system should be pumped every three to five years - depending on the number of persons in the household and the size of the system.

Use Water Efficiently

Using more water than the soil can absorb is the most common reason for failure. The more water a household conserves, the less water that enters the septic system. Efficient water use can improve the operation of the septic system and reduce the risk of failure.

- Replace your existing toilets and shower heads with high-efficiency models
- Install aerators in the kitchen and bathroom faucets
- Repair leaky faucets and toilets
- Run the dishwasher and clothes washer only when they are full

Watch Your Drain

What goes down your drain can have a major impact on how well your septic system works. A garbage disposal takes a lot of water to move scraps down the drain. Once in the tank, some of the solids break down by bacterial action, but most of the grindings will have to be pumped out. Using a disposal could cause you to have your tank pumped more often. Composting is a better way to recycle kitchen scraps.

Care For Your Drainfield

Your drainfield is an important part of your septic system. Remember to:

- Plant only grass over and near your septic system. Roots from nearby trees or shrubs can cause damage.
- Don't drive or park vehicles on any part of your septic system. Doing so can compact the soil and damage the pipes.
- Keep roof drains, water softeners, sump pumps, and storm water run-off away from the drainfield. Flooding the drainfield with excessive water slows down or stops the treatment process and can cause backups.



Why should I maintain my system?

When septic systems are adequately designed, carefully installed and properly maintained, they effectively reduce or eliminate most human health and environmental threats posed by pollutants in wastewater. Routine maintenance is cheaper than emergency maintenance or repairs - and much cheaper than total system replacement.

Saves You Money

Having your septic system pumped regularly (every 3-5 years) is a bargain when you consider the cost of replacing the entire system. Failing septic systems are expensive to repair or replace and poor maintenance is often the culprit.

Protects Your Home Investment

An unusable septic system or one in disrepair will lower your property value and could pose a legal liability. To sell your home, the disposal system has to be in good working order.

Protects Your Health

The safe disposal of sewage prevents the spread of infection and disease, and protects groundwater resources. Inadequately treated sewage can be a cause of groundwater contamination, posing a significant threat to wells and drinking water.

Maintenance

Where is my tank located?

You may be able to find the lids or manhole covers for your septic tank; otherwise the St. Clair County Health Department may have a drawing of your septic tank and drainfield on file.

The tank can be found by gently tapping a steel rod into the ground starting 10 feet from the point where the pipe leaves the house or by waiting for a light snowfall and observing where the snow melts first.

Should I use additives?

Many products such as solvents, yeasts, bacteria, and enzymes claim to improve septic tank performance or reduce the need for routine pumping, but have not yet been found to make a significant difference.

In fact, septic tanks already contain the microbes they need for effective treatment. Periodic pumping is a much better way to ensure a safe and effective system.

Additional Information

A Homeowner's Guide to Septic Systems
U.S. Environmental Protection Agency
800 - 490 - 9198
www.epa.gov/owm

Several bulletins on septic systems are available in Michigan State University Extension's Water Quality (WQ) bulletin series:
MSU Extension Office
200 Grand River Ave, Suite 102, Port Huron
(810) 989 - 6935
www.msue.msu.edu/waterqual/wq-mats.html

Onsite Works! - Housing Education and Research Center, MSU
www.canr.msu.edu/cm/herc/onsite/index.html

National Small Flows Clearinghouse
www.nesc.wvu.edu/nsfc/nsfc_septicnews.htm