

Your Septic System



How It Functions
and
How to Care for It

Western New York Stormwater Coalition



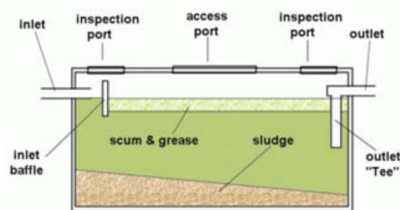
Erie County Department of Environment & Planning



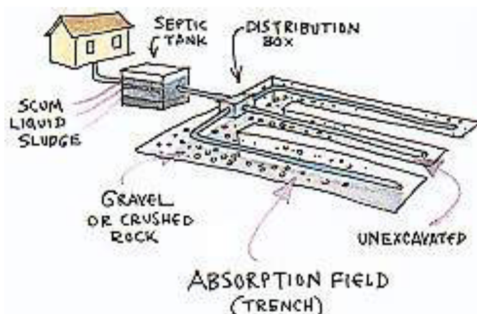
How Your Septic System Works -

If you are like most homeowners, you know very little about your septic system. This is understandable, because it is underground and often "out of sight, out of mind". All household waste that goes down a drain is disposed of through your septic system.

Septic systems have two components - a SEPTIC TANK and a SOIL ABSORPTION SYSTEM. The septic tank is a container, usually with two compartments, fabricated from concrete or plastic. Wastewater from your bathroom, kitchen and laundry room enters the septic tank through your sewer. Heavy solid particles settle to the bottom where bacterial action converts them to a digested sludge. Settling and breakdown of solids takes time and your tank must be large enough for complete digestion to occur.



The drainfield is the soil absorption system and consists of a distribution box, perforated distribution lines made of plastic or clay tile, and an area of soil. In the drainfield, disease causing microorganisms and some suspended solids and nutrients are removed as the liquid is absorbed by the soil. If the soil cannot absorb the liquid at the rate at which it enters the septic tank, the plumbing will "back up" or wastewater will bubble to the surface in the drainfield or at the distribution box.



A properly designed, installed and maintained septic system is an efficient method of wastewater treatment, adequately treating sewage before it mixes with ground waters.

Septic System Care & Maintenance -

Septic system care & maintenance is quite simple. The septic tank and drainfield are designed and installed to handle a maximum calculated daily sewage flow. Consistently exceeding the design flow will eventually overload the system and cause failure. The tank may receive new solids faster than it can treat them and the drainfield may become saturated from excessive water use.

Maintenance of a septic tank will depend largely on the daily sewage flow and individual household wastewater characteristics. With ordinary use and care, a septic tank should not require pumping out more than once every three to five years. It should, however, be inspected every one to two years to determine the depth of accumulated sludge and grease.

Waste from kitchen garbage disposal units puts an extra load on a septic tank system. If a disposal is used, the capacity of the tank should be increased to handle the increased solid wastes. The tank may also require more frequent pumping to remove accumulated solid waste buildup.

Failure to pump out a septic tank system in a timely manner will result in solids or greases overflowing into the drainfield, which in turn may become clogged and stop functioning. If this is happening, not only will the tank have to be pumped out, but the drainfield may also have to be replaced.



Drainfield Protection -

- Plant only grass over and near your septic system. Roots from nearby trees or shrubs might clog and damage the drainfield.
- Don't drive or park vehicles on any part of your septic system. Doing so can compact the soil in your drainfield or damage the pipes, tank, or other septic system components.
- Keep roof drains, basement sump pump drains, and other rainwater or surface water drainage systems away from the drainfield. Flooding the drainfield with excessive water slows down or stops treatment processes and can cause plumbing fixtures to back up.

Septic System Do's & Don'ts -

Do's:

- Know the location and capacity of your septic tank system.
- Have a licensed contractor inspect the tank at least every three years.
- Have tank pumped when the combined depth of the sludge and scum equals 1/3 of the tank liquid volume.
- Install the system so that rainfall and surface water will flow away from the drainfield.
- Grow grass above the system.
- Install water conservation fixtures or devices to reduce the total volume of water entering the system.
- Keep plumbing fixtures such as toilets and faucets in good repair to prevent leakage and wasting of water.
- Keep a maintenance record and inspect the pump (if equipped) on a regular basis.

Don'ts:

- Never flush paper towels, newspapers, wrapping paper, rags or sticks into the system.
- Never allow large, irregular, intermittent or constant volumes of clear water into the system, as with a leaking toilet or faucet.
- Never over-use ordinary household cleaning chemicals that will be flushed into the system.
- Never pour out or empty hobby or home industry chemicals into the system.
- Never allow grease or other bulky waste to enter the system.
- Never flush toxic materials such as pesticides into the system.
- Never plant trees or shrubbery in or on the drainfield area.
- Never allow vehicles (cars, trucks, etc.) to drive across or park on the drainfield. (Protect it from being crushed.)
- Never waste water.
- Never use chemical solvents to clean plumbing lines or a septic tank system.



WNY Stormwater Coalition

A Partnership to Protect Water Quality

For more information on the activities of the Western New York Stormwater Coalition, contact Erie County at:

(716) 858-6370

www.erie.gov/environment/compliance/pollution_sw2