CARING FOR YOUR SEPTIC SYSTEM

A septic system must be properly operated and maintained to protect your health, property value, water resources and provide many years of trouble-free service. This information flyer is designed to help you to do that by answering some commonly asked questions.

How should I care for my septic system?

· DO learn the location of your septic tank and absorption field. Keep a sketch of it handy for servic visits and keep a record of pumping, inspections and other maintenance (see *Maintenance Record*).

· DO inspect and pump out the septic tank on a regular basis. The frequency generally depends on the size of the tank and the amount of wastewater generated in the household (see *Table 1*). The New York State Health Department recommends the contents of the septic tank be pumped every two to three years or when the total depth of sludge and scum exceeds one-third of the liquid depth of the tank. The use of a garbage disposal will increase the amount of solids in the tank by as much as 50% and increase the pump out frequency accordingly. The cost to pump out your septic tank will depend on the size of your septic tank and the pump out contractor's transportation and disposal costs. Consult the yellow pages of your telephone directory to find licensed septic tank cleaners.

Maintenance Record

Keeping a record of your septic system maintenance experience will help you anticipate when the next cleaning may be needed.

Size of Tank

_____ gallons

Date	Work Done	Firm	Cost

Table 1.
Septic Tank Pumping

Tank Size (gals.)	Household Size (number of people) 1	2	3	4	5	6
500	5.8	2.5	1.5	1.0	0.7	0.4
750	9.1	4.2	2.6	1.8	1.3	1.0
900	11.0	5.2	3.3	2.3	1.7	1.3
1000	12.4	5.9	3.7	2.5	2.0	1.5
1250	15.5	7.5	4.8	3.4	2.6	2.0
1500	18.9	9.1	5.9	4.2	3.3	2.6
1750	22.1	10.7	6.9	5.0	3.9	3.1
2000	25.4	12.4	8.0	5.9	4.5	3.7
2250	28.6	14.0	9.1	6.7	5.2	4.2
2500	31.9	15.5	10.2	7.5	5.9	4.8

Estimated septic tank pumping frequencies in years. These figures assume there is no garbage disposal unit in use. Source:Pennsylvania State University Cooperative Extension Service.

· DO practice water conservation. Repair dripping faucets and leaky toilets, run washing machines and dishwashers only when full, avoid long showers, and use water-saving features in faucets, shower heads and toilets.

· DO divert roof drains and surface water from driveways and hillsides away from the septic system. Keep sump pumps and house footing drains away from the septic system as well.

· DON'T use caustic drain openers for a clogged drain. Instead use boiling water or a drain snake to open clogs. Keep all toxic and hazardous chemicals out of your septic system. Even small amounts of paints, varnishes, thinners, waste oil, photographic solutions, pesticides and other organic chemicals can destroy the biological digestion taking place within the system.

· DON'T dump grease or fats down the kitchen drain. They solidify and the accumulation may contribute to blockages in the system.

· DON'T use commercial septic tank additives such as yeasts, bacteria, enzymes or chemicals. These products usually do not help and some may hurt your system in the long run.

· DON'T drive over the absorption field with cars, trucks or heavy equipment.

· DON'T plant trees or shrubbery in the absorption field area. The roots will get into the lines, plugging them up.

· DON'T cover the absorption field with a hard surface such as concrete or asphalt. Grass is the best cover for the field. The grass will not only prevent erosion, but will help remove excess water.

· DON'T use your toilet as a trash can by dumping nondegradables down your toilet or drains.

· DON'T enter your septic tank. Individuals have died from gas asphyxiation.

If I maintain my septic system as recommended, how long will it perform satisfactorily?

Most septic systems will fail eventually. These systems are designed to have a useful life of 20 to 30 years, under the best conditions. Eventually, the soil in the absorption field becomes clogged with organic material, making the system unusable. If the septic tank is not routinely pumped out, the absorption system will need to be replaced much sooner.

(over please)

Why should I care if my septic system fails?

Failing septic systems can:

- cause a serious health threat to your family and neighbors
- degrade the environment, especially lakes, streams and groundwater
- reduce the value of your property
- be very expensive to repair

How will I know if my septic system is failing?

Be alert to these signs of a failing system:

- sewage surfacing over the absorption field (especially after storms or in the spring when groundwater is usually highest)
- sewage back-ups in the house
- lush, green growth over the absorption field
- slow draining toilets or drains
- sewage odors
- the presence of nitrates or bacteria in your drinking well

What is a septic system and how does it work?

A typical septic system contains two major components: a septic tank and an absorption field, sometimes called a leachfield (see *Figure 1*). Wastewater from the house flows into the septic tank. The septic tank is made of concrete, fiberglass or metal and is buried and watertight. The size of the septic tank is based on the number of bedrooms in the residence. All septic tanks must have baffles (internal slabs or tees) at the inlet and outlet to insure proper flow patterns (see *Figure 2*).

Figure 1

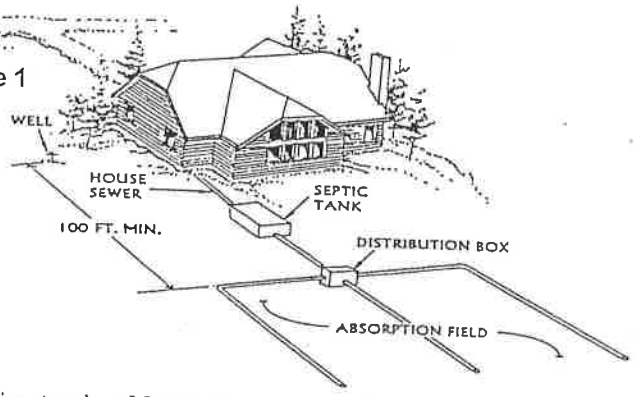
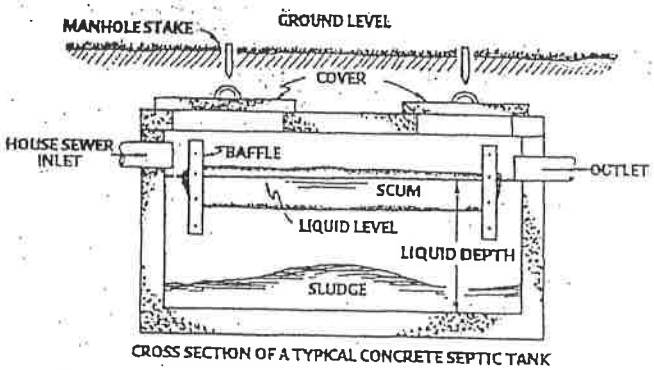


Figure 2



CROSS SECTION OF A TYPICAL CONCRETE SEPTIC TANK

A septic tank allows heavier solids to settle and be partially decomposed by bacteria to form sludge. Light solids and grease (scum) float to the top of the tank where they are retained by the baffles until the tank is pumped. The wastewater from the septic tank (effluent) flows into a distribution box which contains several outlet holes to uniformly distribute the wastewater to the absorption field. Solid plastic pipes, connected to the distribution box outlets, carry effluent to the absorption field. The absorption field contains a series of underground perforated pipes of equal length, laid in trenches about 18 - 24 inches deep, filled with clean stone or washed gravel. The length of trenches required is based on the number of bedrooms in the residence and the soil percolation rate. The effluent coming out of the septic tank contains many microorganisms and pollutants. When this water flows into the perforated pipe in the absorption field, the effluent exits through the holes in the pipe and trickles through the rock or gravel where it is stored until it is absorbed by the soil. As the effluent enters and flows through the soil, many of the bacteria that can cause diseases are filtered out. Some of the other smaller pathogens, such as viruses, are trapped and held (adsorbed) by the soil molecules. Soils can retain certain nutrients such as phosphorous and some forms of nitrogen.

The information in this flyer was compiled from existing sources by Adirondack Park Agency staff. For further information, contact your County Health Department or the New York State Health Department District Office serving your area, as listed in your telephone directory's white pages.

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