What can property owners do to prevent septic system malfunctions?

Properly designed and installed sewage disposal systems function better and longer with proper maintenance. Most of the following recommended maintenance activities are simple and inexpensive for the property owner to implement:

- Conserve water and reduce wastewater flow into the septic tank;
- Have the septic tank pumped at least every three-five years, depending on tank size and household size;
- Do not put fats, oils or leafy vegetable remains down the drain or into the garbage disposal;
- Avoid putting harsh chemicals in the septic system;
- Do not use the toilet to dispose of bulky, slowly decomposing wastes;
- Divert run-off from downspouts, sump pumps, and paved surfaces away from septic tank and absorption area;
- Keep heavy vehicles, equipment and livestock away from the septic system; and
- Do not plant trees and shrubs over or close to the septic system.

What is an SEO and what are his/her duties?

Certified Sewage Enforcement Officers working for local governing bodies handle the septic system permitting process. This includes the review of soil profiles (deep probes) and percolation tests and the issuance of permits.

Where and how should septic system malfunctions be reported?

Complaints about malfunctioning septic systems should be reported directly in writing to the Township Manager at 3147 Research Drive, State College, PA 16801 or by phone to the DEP Regional Office at 570-327-3670.

Where can I obtain more information on septic-related questions?

Questions can be directed to the Township's Sewage Enforcement Officer, Chuck Herr at 814-422-8577. General information may be obtained from the DEP website at www.dep.state.pa.us.

FERGUSON TOWNSHIP

ON-LOT SEPTIC SYSTEM

CARE AND MAINTENANCE FACT SHEET

Questions on this Fact Sheet should be directed to the Ferguson Township Director of Planning and Zoning at 814-238-4651.

SEPTEMBER 2002

What is a septic system?

Septic systems (also called "onlot" disposal systems or OLDS) are sewage systems located on the property of the homeowner. They treat and dispose of domestic sewage through natural processes. Liquid waste from a treatment tank percolates through the soil, where it is neutralized and broken down further. Septic system operation and maintenance is the responsibility of the homeowner. In contrast, a centralized sewage system collects and treats sewage from many homes and/or businesses and disposes of it off site. Centralized systems often use complex mechanical and chemical treatment methods.

How does a septic system function?

 Sewage, both human waste and water used for bathing and washing, flows to the septic tank. Here, primary treatment of the sewage takes place. The heaviest matter falls to the bottom of the tank forming sludge. Lighter matter (scum) floats on top of the liquid (effluent). Sludge and scum must be pumped out regularly.
Septic tank effluent then flows to a distribution box or a solid header in gravity flow systems (see Figure A) or to a pump tank in pressurized systems (see Figure B).

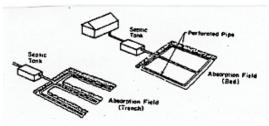


Figure A: Gravity Distribution Systems

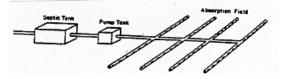


Figure B: Pressure Distribution Systems

3. In both types of systems, the septic tank effluent is then directed to an absorption area constructed of pipe placed within a layer of gravel, and percolates through the soil for additional treatment. The soil neutralizes many of the contents of the wastewater and converts the others to different forms.

How often must my septic tank be pumped?

Up to 50 percent of the solids retained in the tank decompose; the remainder accumulates in the tank. A septic tank should be pumped out at least every three to five years, or according to your local sewage management program which may require more frequent pumping. Under current Pennsylvania law, a 900-gallon septic tank must be used for a home with three bedrooms or fewer. If six people reside in a threebedroom house, the tank should be pumped every 1.3 years. If the same system serves a family of two, the tank would be pumped every 5.2 years. Systems installed before 1971 may have septic tanks smaller than 900 gallons. These tanks may need to be pumped more than once a year.

Are there indications of a septic system in trouble?

Yes. There are many indicators of a malfunctioning septic system. Some indicators can be very obvious to the property owner while others may require more careful observation. The indicators may include:

- Toilet flushes sluggishly;
- Sewer odors in the house and/or drinking water;
- Sponginess around septic tank, distribution box, dosing tank or absorption area;
- Surfacing raw sewage;
- Dosing pump runs constantly or not at all;
- Dosing tank alarm light is on or buzzer sounds
- Backup of sewage into laundry tubs or other fixtures; and/or
- Lush green grass on or around the absorption area when the rest of the lawn is brown.