Your Septic System Is Your Responsibility!

Homeowners are responsible for maintaining their septic systems. Maintaining a septic system protects an investment in a home. If properly designed, constructed and maintained, a septic system can provide long-term effective treatment of household wastewater. A malfunctioning system can contaminate surface and groundwater.

How does a septic work?

A typical septic system has four main components: a pipe from the home, a septic tank, a drain field, and the soil. Microbes in the soil digest or remove most contaminants from wastewater before it eventually reaches groundwater.

A septic tank is a watertight container typically made of concrete, fiberglass or polyethylene, and it is buried underground. It holds wastewater long enough to allow solids to settle out, forming a sludge, and oil and grease to float to the surface as a scum.

It also allows partial decomposition of the solid materials. Compartments and a T-shaped outlet in the septic tank prevent the sludge and scum from leaving the tank and traveling into a drain field. Screens are also recommended to keep solids from entering the drain field.

Potential Problems

When a system fails to function properly, wastewater is not treated prior to reaching a water source. This can result in contamination of ground and surface water sources (including residential wells), odor problems, and health risks.

Design and installation

Obtain a permit from a local building and planning department. These permits are a requirement of state and county law, and installing or upgrading a system without a permit is illegal.

Select a tank. Tanks must be watertight and resistant to corrosion. Metal tanks are not recommended.

Determine tank size. A minimum 1,000-gallon tank is required for residences with up to four bedrooms (not bathrooms). An additional 250 gallons is required for EACH additional bedroom.

Determine size of the absorption field. The size is based upon the size of the dwelling and tank, and the soil type.

Determine location of tank and leach field. The location of each of these items is dependent on the regulations of the local building and planning department.

Soil exploration. Soil exploration should be used to determine the distance to groundwater or bedrock and to examine the soil texture, structure, and color.

Conduct percolation tests. Visit a local Department of Building and Planning.

Maintenance

Inspect and pump regularly. A septic system should be inspected by a professional at least once every three years and the tank should be pumped every three to five. Always use caution when inspecting a system without professional assistance; toxic gases can be lethal.
Septic System for Your Health and Safety

Avoid overloading the system. Conserve water and repair leaky fixtures. Garbage disposals will cause rapid accumulation of sludge in a septic tank, and their use should be minimized or eliminated to keep the septic system functioning properly.

Watch your drains. In general, it is not recommended to use septic tank additives. In most cases, they do not help and may even be harmful to a system.

Avoid damage to a leach field. Plant only grass on the absorption field, and do not drive or park over the system.

Poor maintenance is a common cause of septic system failure. However, it should be recognized that a septic system does NOT have an infinite life span. Even well-designed and maintained systems eventually need replaced.

This article is an excerpt from A Wyoming Homeowner’s Guide to Septic Systems. The full brochure can be found at www.conservewy.com, or contact a local conservation district for more information. A homeowner self-assessment is included in the brochure.

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