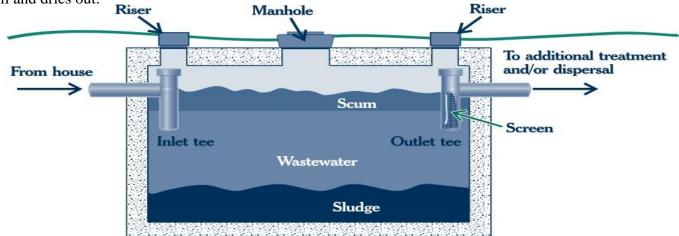
# **Understanding and Maintaining Your Septic Tank System**

From the Branch-Hillsdale-St. Joseph Community Health Agency Division of Environmental Health

Many residents in Branch, Hillsdale and St. Joseph counties live in homes that are not served by public sewer. They have a septic tank and drainfield system. Maintaining these systems is important to keep them working properly over a long period of time. Good septic maintenance also protects the health of our families, our friends and neighbors and the environment.

# **How a Septic System Works**

A typical septic system includes a septic tank and some type of a disposal field. The septic tank collects the waste water from the house and separates the solids from the liquids. The heavy solids settle to the bottom to form a sludge layer. Greases and soaps float to the top to form a scum layer. Bacteria begin to work on the solids and partially digest them. The liquid portion flows into a drain field, which typically consists of perforated pipes in trenches. Bacteria and viruses are removed as the liquid moves through the soil and dries out.



Why do I need to maintain my septic system?

Septic systems need proper care and maintenance. We have all heard stories about septic systems that have worked well for many years without any maintenance or care. These are exceptions to the norm. Eventually, the bacteria in the septic tank become unable to digest all of the solids in the tank. The scum and sludge layers begin to build up. This may cause the solids to block the sewer line from the house or pass out into the drainfield and clog the pipes. A clogged drainfield may result in surfacing sewage, offensive odors, plumbing backups, or contamination of surface or ground water. Repairs to a system can also be costly. It costs much less to maintain a system than to replace it.

# Maintaining a Septic System – Pumping out the tank?

The need to pump depends on three things; the size of the tank, the amount of wastewater, and the solids content of your wastewater. The tank should be pumped if the sludge layer has built up to within 25 to 33 percent of the liquid capacity of the tank. A good rule of thumb is; for a family of 4 with a 1,000 gallon tank, the tank should be pumped approximately once every 4 years. If you have a garbage disposal, the tank should be pumped more frequently. When you have your tank pumped, have all compartments of the tank pumped (some tanks have only 1 compartment) and be sure the pumper you use is licensed to assure proper disposal of the materials pumped.

#### The Drainfield

- Drainfield should require very little maintenance.
- There should be NO surfacing sewage.
- Keep vegetation to a minimum (no trees, shrubs or deep-rooted plants).
- Roof drains should be directed away from the drainfield.
- A thick growth of grass or spongy ground may indicate a potential failure.

## What not to put down the drain

- Cooking greases, oils, and fats
- Pesticides, paints, paint thinners, solvents
- Disinfectants, poisons, and other household chemicals
- Diapers, coffee grounds and feminine hygiene products
- Limiting or eliminating the use of your garbage disposal will minimize the flow of excess solids to your tank.
- Some organic chemicals will flow untreated through the septic tank and the soil, thus contaminating the underlying groundwater.
- Leftover medications should never be disposed of in your septic system.

# Other Keys for Maintaining your Septic System

- Keep, for your records, a diagram showing the location of your tank and drainfield
- Keep cars and heavy equipment off the system.
- Do not plan any building additions, pools, driveways near the septic system
- Periodically check your plumbing for leaky faucets and toilets. Many soils that can absorb the 200 to 250 gallons of sewage usually produced each day by a family of four would become waterlogged if an extra 250 gallons were added.
- Be sure that foundation drains, roof waters, gutter waters, and surface waters from driveways and other paved areas do not flow over the septic tank or the drainfield.

## **Final Septic Thoughts**

The septic system is an efficient, inexpensive, and convenient method for treating and disposing of household wastewater, and with minimal maintenance and care it can last for many years. Septic systems will adequately absorb and purify wastewater if they are properly maintained. A few precautions can save you anguish and money.

For additional information on septic systems or other environmental concern, contact us at:

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