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Maintaining Your Septic System

Ag Facts

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# Maintaining your Septic System

## When A Septic System is:

- suitably located
- adequately designed
- carefully installed
- **And Properly Maintained**

## You will have a waste disposal system that is:

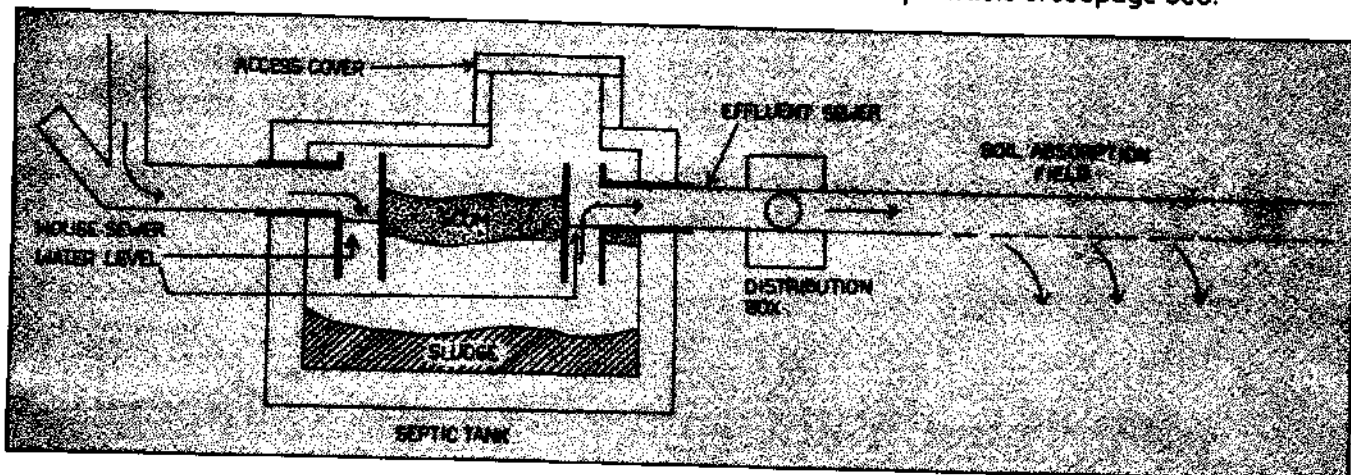
- simple
- economical
- effective
- safe

**Maintenance is the key** to a lasting waste disposal system.

This file contains information that will help you maintain your septic system. It also provides a place for you to record and store vital information about your system. It should be filed together with other documents about your home and property.

## How your System Works

A septic system has just two basic working parts: a septic tank and a soil absorption field or seepage bed.



Wastes flow from the house into the septic tank. Here, most solids are separated to the bottom and are partially decomposed by bacteria to form **sludge**. Some

solids float and form a scum mat on top of the water.

The liquid effluent from the septic tank, carrying disease causing components and other liquid waste products, is

discharged into the soil absorption field.

Here the water is further purified by filtration and decomposition by micro-organisms in the soil. The purified wastewater then moves

to the groundwater system. This is the last line of defense to prevent polluted waste from entering lakes, streams, and groundwater.

# Septic System Maintenance

## Septic Tank

The primary maintenance point in a septic system is the septic tank. Inspection is accomplished by measuring scum depth and sludge depth in the tank once each year. If you do not know where the tank is located, a steel rod gently tapped into the ground, starting ten feet from where the sanitary drain leaves the house, should help you find it.

## Measuring Scum Depth

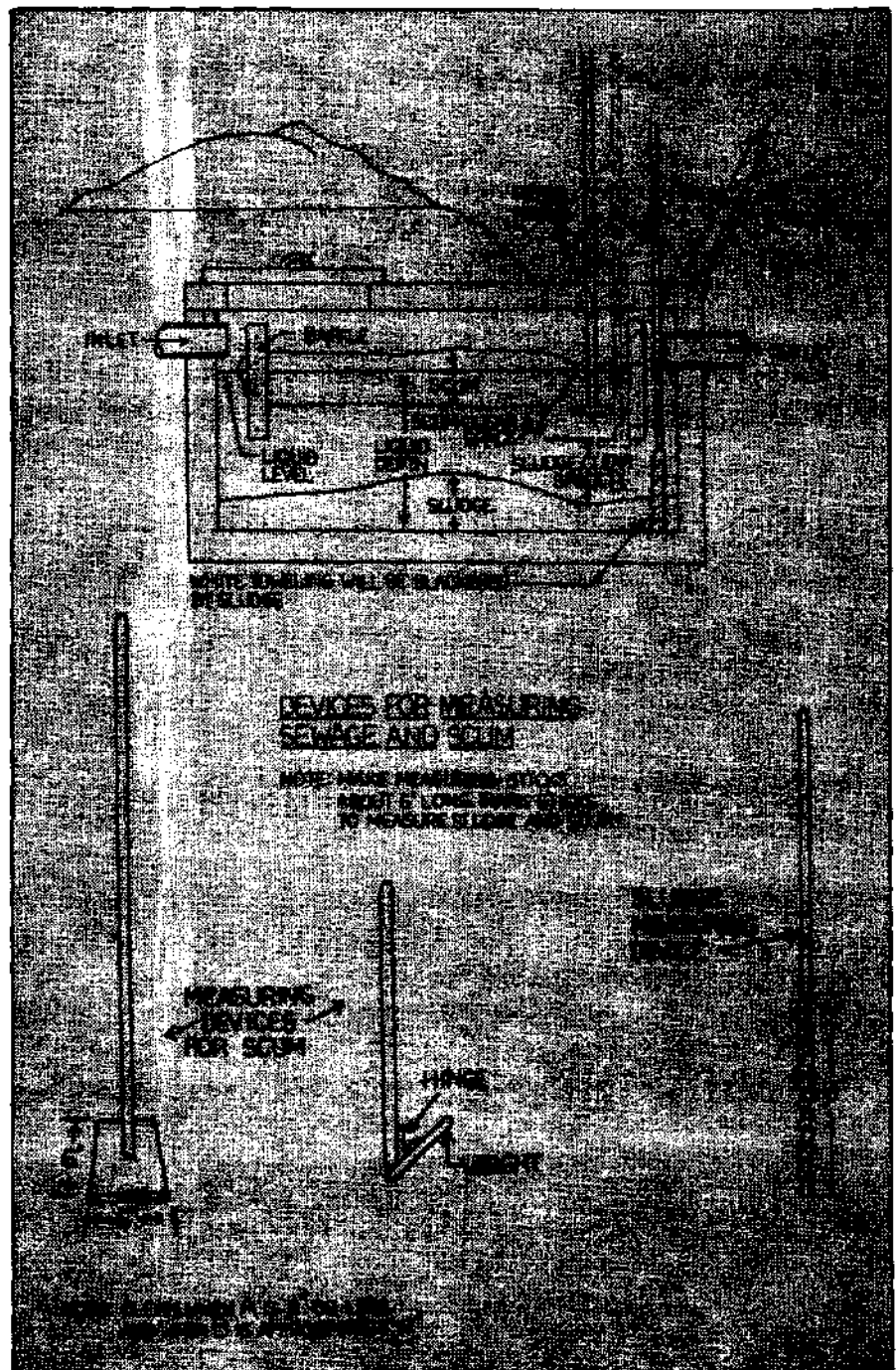
1. Attach a 6 inch square board to the bottom of a stick about 6 feet long.
2. At the outlet end of your tank, extend the stick through the scum layer to find the bottom of baffle or effluent pipe.
3. Mark your stick to indicate that point.
4. Raise the stick until you "feel" or see the bottom of the scum layer.
5. Mark your stick again to indicate that point.
6. If the two pencil marks are 3 inches apart or less, or if the scum surface is within 1 inch of the top of the outlet baffle, the tank requires cleaning.

## Measuring Sludge Depth

1. Wrap 3 feet of white rag or towelling around a long stick.
2. Place the stick into the sludge, behind the outlet baffle if possible.
3. Hold stick there for several minutes.
4. Remove stick noting the sludge line.

5. If the sludge line is within 18 inches of the outlet fitting, the tank requires cleaning.

If you do not clean your tank at these critical points, solid material will begin to leave your tank and enter your soil absorption field. This can lead to early and costly failure of the drain field or seepage bed.



# Soil Absorption Field

The second important part of your septic system is the **drain field** or **seepage bed**. If it is properly installed and sized, it will receive treated effluent from the septic tank for many years of trouble free service. The soil absorption field should require no maintenance when these simple precautions are observed.

1. Be absolutely sure your septic tank is in good operating order.
  - never allow sludge or scum to escape from the septic tank. It will clog your drain tiles and cause the drain field to fail
  - observe the recommended "do's and don'ts"

2. If your system is equipped with a distribution box between the septic tank and soil absorption field, at one year intervals allow one side of your system to "rest".
3. If your system is equipped with a dosing chamber, be sure the submersible pump is operating and properly maintained for uniform discharge of effluent into the absorption field, followed by drainage between doses.
4. Keep automobiles and all heavy vehicles off the field.

5. Don't allow puddles of stormwater to form over a field.
6. Don't fertilize the soil above a drainfield.
7. Don't stockpile snow or soil on your drain field.
8. Don't allow downspouts to drain onto or into your drain field.
9. Dense grass cover and other shallow rooted plants are beneficial over a drain field.
10. Think ahead when planting trees and shrubs. Although they promote moisture removal from the drainfield, their roots may clog nearby drain tiles.
11. Mark the boundaries of your drain field as a reminder.

## Recommendations

- To prolong the life of your septic tank
- To minimize maintenance costs

### Do

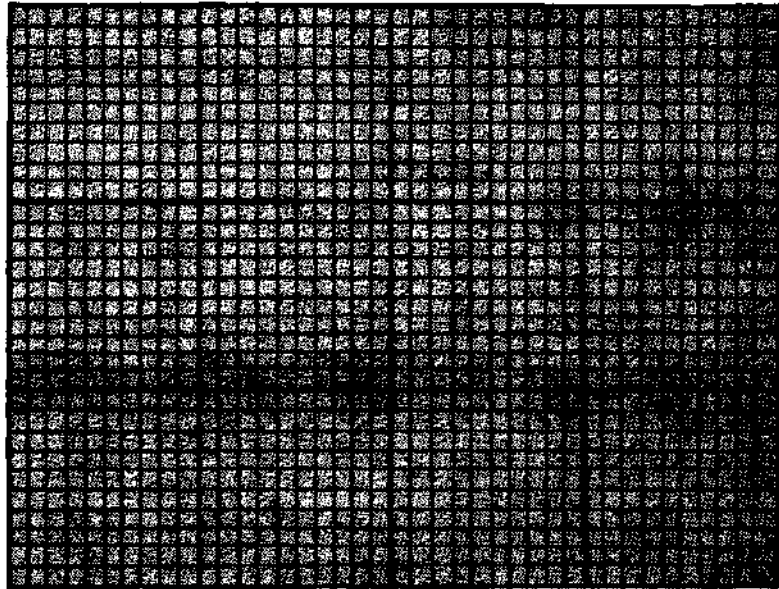
1. Inspect for scum and sludge depth once each year.
2. Pump tank at proper intervals (usually every 1 to 5 years).
3. Limit water entering your tank:
  - use water-saving fixtures (faucets, showers, toilets)
  - prevent basement sump pump connection to tank
  - drain appliances one at a time
  - spread clothes washing over the entire week and avoid half-loads
  - prevent roof, foundation and basement drainage from entering tank
  - minimize amount of water used for bathing and dishwashing
  - fix all faucet and toilet floor valve leaks.

### Don't

1. Use chemicals to clean or "sweeten" your system except on the advice of your local health department.
2. Use a kitchen garbage disposal unit.
3. Put harmful materials in the tank. Avoid fats, solvents, oils, disinfectants, paints, chemicals, poisons, coffee grounds, paper towels, disposable diapers, sanitary napkins and tampons.

# Septic System Layout

If you do not have a sketch of your septic system to place in this file, you should fill in the space provided, showing the relative location of your septic system components in relation to your house.



# Preventive Maintenance Record

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

date	work done	firm	cost

# Helpful Sources of Additional Information

**Home Sewage Disposal**, Michigan Environmental Health Association, 1979.

**Performance of Septic Tank Disposal Fields in Representative Michigan Soils**, Michigan State University Agricultural Experiment Station, Research Report 57, 1973.

**Questions and Answers about Home Sewage Disposal**, Michigan State University Cooperative Extension Service and Michigan Department of Public Health.

**Soils and Septic Tanks**, U.S.D.A. Soil Conservation Service, Agricultural Information Bulletin — 309, 1975.

**Soils Suitable for Septic Tank Filter Fields**, U.S.D.A. Soil Conservation Service, Agricultural Information Bulletin No. 243, 1967.

<b>Your Septic System Installer</b>	
<b>Name</b>	_____
<b>Address</b>	_____
<b>Date Installed</b>	_____
<b>Phone</b>	_____

<b>Your Septic System Pumper</b>	
<b>Name</b>	_____
<b>Address</b>	_____
<b>Phone</b>	_____