



On-Site Septic Systems Must be Properly Maintained

A septic system is an effective and economic means of disposing and neutralizing wastewater for residences and small commercial properties, **if and only if it is properly designed, used and maintained.** When septic systems are not properly used, they do not work and cause health and environmental risk.

What Is A Septic Waste Disposal System?

When you flush the toilet or pour material down the drain, the waste goes into an on-site sewage system called a Septic System. A Septic System a simple, effective process for sewage treatment and disposal of wastewater.

- A pipe leading from the sinks, baths and toilets of residences or commercial property leads to a Septic Tank made of concrete or plastic, buried underground, typically with a clean-out port on top.
- Sewage flows by gravity from the building to the tank, and then from the tank to a Leaching Field. (In special cases, a septic system pump is required).
- The Leaching Field (or Drain Field) is designed to disperse aqueous effluent into the soil with a trench or drywell.
- The Leaching Field trench is a series of buried perforated pipes on a bed of gravel or coarse sand. The size of the Field is determined by the number of bathrooms in the building that it serves.

A Cross-section of a typical Septic Tank

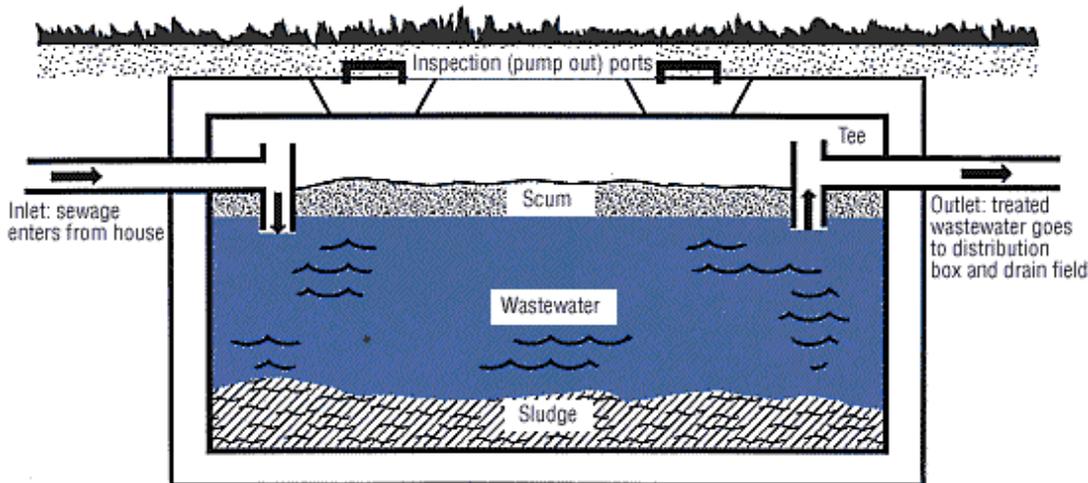


Figure from Massachusetts Department of Environmental Protection website

How Does A Leaching Field Clean Waste Water?

- The soil around the Leaching Field acts as a biological filter, removing harmful organisms that could contaminate ground water, wells and drinking water.
- Solids and large particles sink to the bottom of the tank, forming sludge.
- Fats, grease and other material like hair float to the surface of the tank and form a scum layer. These and any other materials that clog the septic system should not be used in sinks, baths or toilets.

What Can Go Wrong?

- A Septic Tank must be maintained regularly. If scum materials are not removed periodically, they will overflow the tank and clog the pores of the soil in the leaching field.
- A Septic System must be located in a dry area that is properly drained. When leaching fields are flooded or located too near waterbodies or wetland, they do not function, often evident in foul odor and backups.
- If a Septic System is clogged or flooded, the wastewater may back up into the house or contaminate the ground, and nearby groundwater and wells.
- The spillover carries pathogens—bacteria and viruses that cause dysentery, hepatitis and typhoid fever.
- A clogged field that will no longer facilitate free flow and sanitary disposal of wastewater will need to be replaced at considerable cost.
- In communities where there is insufficient area or soil capacity for proper septic systems, or where individual systems are not maintained, then community-wide sewerage systems are required to maintain public health, at far greater cost to households and municipalities to install and maintain.

What Can Go Right?

- Properly designed and maintained Septic Systems can provide years of safe and sanitary waste disposal service for households and small commercial properties.

Do I need a Discharge Permit for My Septic System?

No, but the Trumbull Monroe Health District (TMHD) requires a permit be issued for any new septic system installation or existing system repair, however minor. The TMHD issues permits for minor repairs such as replacing a tank cover, distribution box or section of pipe. The cost of the permit is \$10.00. The permit application can be found on the TMHD's website at <http://www.tmhd.org/>.

Some Recommended Septic System Best Practices:

- If you are a renter, ask your landlord if the home is on septic or connected to street sewer.
- Use drain covers to keep solids out of your septic system.
- Do not dump animal fats (e.g., bacon grease, deep fryer grease) down sink drains. Excess grease and fat can cause the scum layer to push down into the liquid layer and exit the septic tank. Once in the Leaching Field, animal fats plug up the leach drain holes. This may require a costly repair job.
- Do not put hazardous chemicals into drains. These chemicals will pass through the septic system, killing the natural microbes in your tank and potentially contaminate local groundwater.

- The only solid entering your septic system should be toilet paper. Your system is not designed to handle cigarette butts, coffee grounds, sanitary napkins, tampons, condoms, baby wipes or paper towels. Also, products labeled as "flushable" often are not appropriate for a septic system.
- Do not dump medicines down the drain. They can damage the microbes treating your wastewater.
- Do not plant trees with deep roots near your septic tank or Leaching Field.
- Industry experts recommend getting your septic tank pumped out and its filter cleaned every 2 to 5-years. However the Conservation Commission advises there is some risk involved with leaving a septic system uninspected for a period of 5-years.

Additional Resources

U.S. EPA's Septic Smart Website:

<http://water.epa.gov/infrastructure/septic/>

Connecticut Department of Public Health's Septic Systems 101 Factsheet:

http://www.ct.gov/dph/lib/dph/environmental_health/environmental_engineering/pdf/Septic_Systems_101.pdf

Oklahoma Department of Environmental Quality's Homeowners Guide for Maintenance and Care of On-Site Sewage Systems:

<http://www.deq.state.ok.us/pubs/local/sptcbklt.pdf>

Purdue University Cooperative Extension's Operating and Maintaining Home Septic Systems:

<https://www.extension.purdue.edu/extmedia/ID/ID-142.html>

Suggestions and comments welcomed. Please contact us at: **Conservation@trumbull-ct.gov**

SEPTIC SYSTEM IQ

**DON'T DISPOSE OF THESE WASTES IN YOUR SINK, TOILET OR BATH
THEY WILL CLOG YOUR SEPTIC SYSTEM**

COFFEE GROUNDS



HAIR



DISINFECTANTS



DIAPERS



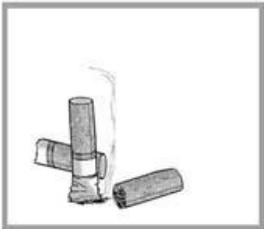
DUST & DIRT



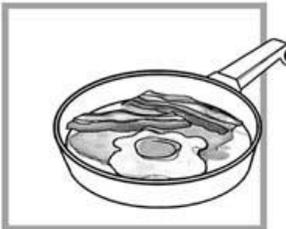
OIL PAINTS



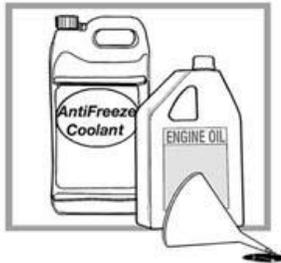
CIGARETTE BUTTS



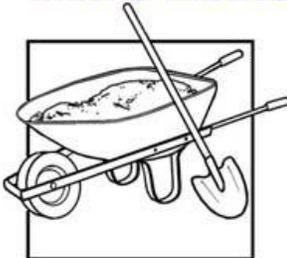
GREASE / COOKING OILS



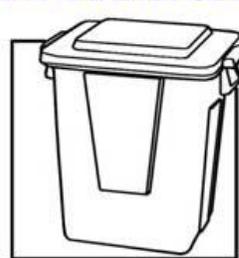
PETROCHEMICALS



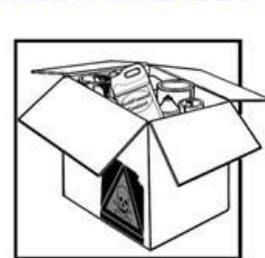
WHAT'S THE BEST WAY TO DISPOSE OF THESE WASTES?



**compost &
gardening**



**curbside garbage
collection**



**hazardous waste
collection center**

ANSWERS ON REVERSE

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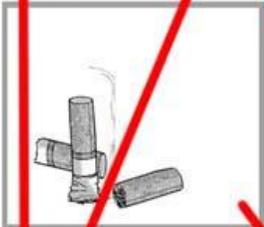
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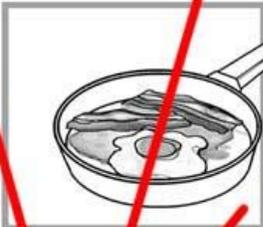
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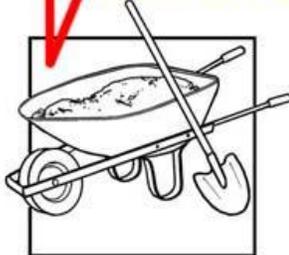
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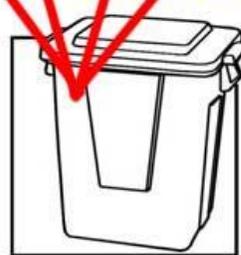
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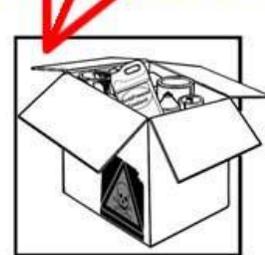
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