

HOW TO PROPERLY CARE FOR YOUR HOME SEWER SYSTEM:

Home sewer systems function very well with minimal care. In fact, most systems will require only an inspection and pumping once every three years if they are maintained properly. Most modern home sewer systems have a life span of nearly 25 years. Here are some helpful hints you should follow to maintain a well-operating and trouble-free home sewer system.

Do's

- Do have the home sewer system inspected and pumped (if needed) by a professional approximately every three years. Failure to pump out septic tanks is the most common cause of home sewer failure. If the septic tank fills with an excess of solids, the wastewater will not have enough time to settle in the tank. These excess solids will then pass on to the drain field or line where they will cause clogs.
- Do know the location of your home sewer system and keep a record of all inspections, pumpings and repairs.
- Do ensure that the home sewer system is installed so that rainfall and surface water flow away from your entire system. Route gutter and downspouts away from the septic tank and drain field area. Excess water can come into the system during storms, causing failure.
- Do grow grass or very small plants (not trees or shrubs) above the home sewer system to hold the drain lines in place. Water conservation through creative landscaping is a great way to control excess runoff.
- Do install water-conserving devices, such as low-flow showerheads and low-volume toilets, to reduce the volume of water flowing into the home sewer system.

Don'ts

- Do not put grease or non-biodegradable materials down your sink or toilet. Grease can thicken and clog pipes.
- Do not put paint thinner, polyurethane, anti-freeze, pesticides, disinfectants, or other strong chemicals into the system. These products can cause major upsets in the septic tank by killing the biological part of your system, resulting in polluted surface or ground water. Small amounts of standard household chemicals such as bleach will be diluted in the tank and will not damage the system.
- Do not flush indigestible materials such as diapers, cigarette butts, feminine napkins, cat litter, plastic, nylon, or even hair into the home sewer system. These products do not decompose and may result in costly repairs.
- Do not use a garbage disposal that feeds into the system. If you do have one, limit its use. Adding food wastes or other solids reduces your system's capacity and increases the need for pumping.
- Do not plant trees within 30 feet of the home sewer system, the roots may damage drain lines.
- Do not perform all your machine-washing on the same day. The large volume of water can overwhelm the system.
- Do not use septic tank additives. They usually don't work and may harm the system.

HOW OFTEN SHOULD I PUMP?

Maintenance is the single most important consideration in making sure a home sewer system will continue to function properly.

An astonishing number of home sewer system owners believe that if they haven't had any problems with their systems, they don't need to pump out their septic tanks. Nothing could be further from the truth. As your home sewer system is used, solid materials settle to the bottom of the septic tank, forming a sludge layer. Grease and lightweight materials float to the surface of the septic tank and form a scum layer. A properly designed home sewer system has enough space for approximately three years of safe sludge accumulation. When the sludge level increases beyond this point, sewage has less time to settle properly before leaving the

tank. As the sludge level increases, more solid wastes escape into the drain field or drain line. If the lines become so clogged that they cannot absorb liquid at the rate at which it enters the septic tank, the plumbing will back up or unsanitary wastewater will bubble to the surface. It is important to note that the drain field will not fail immediately when a full tank is not pumped. However, continued neglect will result in a costly system failure. *Remember: Regular pumping helps to prevent solids from escaping into the drain field and clogging the soil. A few hundred dollars spent now could save you thousands later!*

Tank Size (gallons)	Household Size (Number of People)									
	1	2	3	4	5	6	7	8	9	10
500	5.8	2.6	1.5	1.0	0.7	0.4	0.3	0.2	0.1	NA
750	9.1	4.2	2.6	1.8	1.3	1.0	0.7	0.6	0.4	0.3
1000	12.4	5.9	3.7	2.6	2.0	1.5	1.2	1.0	0.8	0.7
1250	15.6	7.5	4.8	3.4	2.6	2.0	1.7	1.4	1.2	1.0
1500	18.9	9.1	5.9	4.2	3.3	2.6	2.1	1.8	1.5	1.3
1750	22.1	10.7	6.9	5.0	3.9	3.1	2.6	2.2	1.9	1.6
2000	25.4	12.4	8.0	5.9	4.5	3.7	3.1	2.6	2.2	2.0
2250	28.6	14.0	9.1	6.7	5.2	4.2	3.5	3.0	2.6	2.3
2500	31.9	15.6	10.2	7.5	5.9	4.8	4.0	4.0	3.0	2.6

Number of
Years

Note: This chart is only a guide. A home sewer system may need to be pumped more or less often depending on how the system is used. A professional pumper should always be consulted.

WHERE CAN I FIND MORE INFORMATION?

Sewage Treatment Regulations

- Your parish health unit (LA Department of Health and Hospitals)

Determining Your Soil's Suitability for a Particular Type of System

- Your parish health unit (LA Department of Health and Hospitals)
- Your district office of the Natural Resources Conservation Service (NRCS) (U.S. Department of Agriculture)
- Your parish extension agent (LA Cooperative Extension Service)

How Sewage Treatment Systems Work

- Your parish health unit (LA Department of Health and Hospitals)
- Your parish extension agent (LA Cooperative Extension Service)

Problems With Sewage Treatment Systems

- Your parish health unit (LA Department of Health and Hospitals)
- Your parish extension agent (LA Cooperative Extension Service)

Preventing Non-point Source Pollution

- Louisiana Department of Environmental Quality (Water Quality Management Division, non-point source pollution prevention program)
- Department of Natural Resources, Coastal Management Division

For a comprehensive catalog of septic materials that includes videos, newsletters, computer software, brochures, etc., call:

National Small Flows Clearinghouse 1-800-624-8301

THE HAZARDS

OF FAILING HOME SEWER SYSTEMS

Effects on Human Health:

The epidemic that killed millions of people in the Middle Ages was caused by the mixing of human wastes with drinking water supplies.

The primary reason for safe disposal of sewage is to prevent the spread of infection and disease. If a home sewer system is working properly, it will effectively remove disease-causing bacteria. However, if the system is malfunctioning, there is a high risk of ground and surface water contamination.

With approximately one-third of the U.S. population on home sewer systems, over one trillion gallons of waste are disposed of below ground every year. Inadequately treated sewage is the most frequently reported cause of groundwater contamination. Contamination poses a significant threat to drinking water and human health because diseases and infections may be transferred to people and animals. Dysentery, hepatitis, typhoid fever, and gastrointestinal illness are some of the more serious examples.

Nutrients from failing home sewer systems can also cause health problems. For instance, excess nitrates in drinking water pose a significant threat to the health of infants. When ingested, nitrates can interfere with the blood's ability to carry oxygen, causing "blue baby" syndrome.

Impacts to Coastal Waters:

The contamination of coastal waters by faulty home sewer systems can have disastrous effects on environmental, commercial and recreational resources.

Failing home sewer systems may leak excessive amounts of nutrients and bacteria into coastal waters. This pollution can harm aquatic plants and animals.

When nutrients, such as nitrogen and phosphorous enter watersheds, they can cause excessive plant and algal growth. Algae may become so abundant that they block sunlight in the water. This can shade and kill beneficial plants. In addition, the algae will begin to decay. When this occurs, they deplete oxygen in the waters causing fish kills. Excessive plant growth caused by increased nutrient levels also makes boating, fishing, and swimming less enjoyable.

Improperly treated sewage may also contaminate surface waters, increasing the chance that swimmers will contract a variety of infectious diseases.

Here in Louisiana, our coastal waters provide a tremendous economic benefit to the state and to those fishermen that depend on our productive waters for their livelihood. Bacteria released into coastal waters can contaminate important crab, shrimp and oyster fisheries. Consider the oyster. These shellfish feed by filtering

water through their bodies. If bacteria are introduced into the water near an oyster bed, the oysters will accumulate these bacteria in their system. Although this does not harm the oyster itself, it will certainly cause illness in the human eating the oyster. In addition, contamination of a particular fishery also may lead to the closure of a fishing ground, resulting in economic hardship for those who depend on the fishery.

How to Prevent These Problems:

- Regularly pump and maintain your system.
- Conserve water in your home by installing water-saving devices.
- Redirect surface water flow away from the drain field or line.
- Replace your home sewer system if necessary.
- Construct new home sewer systems as far away from the shoreline as possible.