

Troubleshooting

Finding an Existing System

Finding the septic system may not be an easy task, but is necessary for proper maintenance of the septic tank, troubleshooting problems, and making future plans for the property. Many counties and cities with permit and inspection programs for septic systems will have this information on file. If no plans exist, the following steps can be taken.

First, locate the septic tank. If the access manhole or inspection pipes are at ground level, they will be easy to find. Unfortunately, they are often buried several inches, or even several feet, below the ground surface.

With a metal rod as a probe, start poking around in the soil 10 to 15 feet from the foundation of the house. A metal detector may be of assistance in finding the tank since most concrete septic tanks contain metal reinforcing rods.

Next, locate the drainfield. Mounds are easy to find, but a drainfield system in the ground may be more difficult. Try looking around the yard in the general direction where the sewer pipe left the house for an area where the grass grows differently. These clues may help locate the drainfield:

- An area where the grass isn't growing well, or where the grass is greener or grows faster.
- An area where there is a slight depression or mound.
- An area where the soil is soggy when the rest of the yard is dry.

Often, a licensed contractor or inspector has tools to locate the tank. Once the tank is located, be sure to make a map of its location. If the soil treatment system cannot be found, there may not be one or it may be discharging into ground or surface water.

Common Problems

Existing septic systems may fail for a number of reasons. For the owner, the system is failing if it is not treating the wastewater effectively. The most common causes of system failure are excessive water, improper maintenance, or an inadequately designed system. ***Diagnosing the specific causes may be difficult for the owner and often requires the skills of a professional.*** The following chart shows common problems and their possible causes and remedies.

Septic System Troubleshooting Guide for Homeowners

Problem	Risks	Potential Causes	Potential Remedies
Sewage backs up into house and/or plumbing fixtures don't drain or are sluggish	Human contact with sewage is a serious public health risk. Many waterborne diseases exist in household sewage. AVOID CONTACT.	<ul style="list-style-type: none"> • Excess water entering system • Improper plumbing • Blockage in plumbing • Improper operation • Pump failure • Improper system design • Roots clogging pipes 	<ul style="list-style-type: none"> • Fix leaks • Install water-saving fixtures • Stop using garbage disposal • Clean septic tank and check pumps • Replace broken or cracked pipes and remove roots • Seal pipe connections • Avoid willow trees near system
Sewage surfacing in yard	Human contact with sewage is a serious public health risk. Many water-borne diseases exist in household sewage.	<ul style="list-style-type: none"> • Excess water use • System blockages • Improper system elevations • Undersized soil treatment system • Pump failure or improper operation 	<ul style="list-style-type: none"> • Fix leaks • Install water-saving fixtures • Clean septic tank and check pumps • Consult professionals • Fence off area until problem is fixed
Sewage odors — indoors	Toxic gases can cause discomfort and illness.	<ul style="list-style-type: none"> • Sewage surfacing in yard • Improper plumbing • Sewage backup in house • Unsealed ejector sump pump • Roof vent pipe frozen closed 	<ul style="list-style-type: none"> • Repair plumbing • Clean septic tank and check pumps • Replace water in drain traps
Sewage odors — outdoors	Major nuisance, but no serious health risk	<ul style="list-style-type: none"> • Source other than owner's system • Sewage surfacing in yard • Inspection pipe caps damaged or removed 	<ul style="list-style-type: none"> • Clean tank and check pumps • Replace damaged caps • Repair or replace drainfield
Contaminated drinking or surface waters	The above public health risks are magnified by possible ingestion of contaminated water. Drinking	<ul style="list-style-type: none"> • System too close to well, water table, or fractured bedrock • Cesspool or drywell in use • Sewage discharges to surface or groundwater • Improper well construction 	<ul style="list-style-type: none"> • Replace your well and/or septic system • Contact a local unit of government to investigate other potential sources



- contaminated water can cause health problems such as dys - entry, hepatitis, and, for infants, methemoglobinemia.
- Broken water supply pipe
 - Source other than homeowner's system
 - Broken sewage lines

Problem	Risks	Potential Causes	Potential Remedies
Lift station alarm activated	Tank effluent may back up into the house.	<ul style="list-style-type: none"> • Pump failed • Fuse breaker tripped • Pump unplugged • Controls malfunctioning 	<ul style="list-style-type: none"> • Check breaker and plugs • Check controls and pump • Make sure professional replaces pump with proper size unit
Distribution pipes and/or soil treatment system freezes in winter	The system may be inoperable.	<ul style="list-style-type: none"> • Improper construction • Check valve in lift station not working • Foot or vehicle traffic over piping • Low flow rate • Lack of use • Undersized pump 	<ul style="list-style-type: none"> • Check construction • Examine check valve and/or replace it • Keep people and vehicles off area • Increase water use • Have someone use water in house if you are away • Increase frequency of pump cycling • Operate septic tank as a holding tank • Pump system in fall and use carefully over winter months • Don't use antifreeze