

Flooded Private Sewage Systems

SAFETY, SANITATION AND CLEAN-UP CONCERNS

Flooding of a private sewage system can be a hazardous situation for homeowners. It may lead to a back-up of sewage in the home, contaminated drinking water and lack of sanitation until the system is fixed. While you don't have control over rainfall or flooding in your area, you can prepare for high water problems and respond appropriately to emergency flooding.

HOW PROBLEMS OCCUR

When flooding or saturated soil conditions persist, a private sewage system cannot function properly.

Soil treatment systems for wastewater rely on aerobic (with oxygen) regions to reduce the amounts of chemicals and living organisms (viruses, bacteria and protozoa). When the soil is saturated or flooded, those hazardous materials can enter the groundwater and your drinking water supply.

PREPARING FOR FLOODING

If you are prepared when flooding occurs, your family can be safe and your system should survive. To prepare for a flood you should:

- ◆ *Make sure all septic tanks are full of liquid.* The high-water season is not the time to have tanks pumped; empty tanks are buoyant and may “pop” out of the ground during flooding.
- ◆ *Plug floor drains, if necessary, to keep sewage from backing up into the basement.* Floodwaters may still enter the basement through cracks and seams, however.

DURING A FLOOD

- ◆ *Discontinue use of your private sewage system.* Use portable toilets, if possible, or use any large container with a tight-fitting lid for a temporary toilet. Line the container with a plastic bag. After each use, add chlorine bleach or disinfectant to stop odor and kill germs. If necessary, bury wastes on high ground far away from your well.
- ◆ *Remember that a well may become contaminated during a flood.* Therefore, **DO NOT DRINK THE WATER.** Drink bottled water, or disinfect water before drinking. Contact your local health department for disinfection instructions.
- ◆ *Do not bathe or swim in floodwater.* It may contain harmful organisms.
- ◆ *Shut off power to a sewage lift pump if you have one in the house or in a pump chamber (mound, in-ground pressure, at-grade systems).*

AFTER THE FLOOD

- ◆ *Do not use the sewage system until water in the disposal field is lower than the water level around the house.*
- ◆ *If you suspect damage to your septic tank, have it professionally inspected and serviced. Signs of damage include settling or inability to accept water. Most septic tanks are not damaged by a flood since they are below ground and completely covered. However, sometimes septic tanks or pump chambers become filled with silt and debris, and must be professionally cleaned. If tile lines in the disposal field are filled with silt, a new system may have to be installed in new trenches. Because septic tanks may contain dangerous gases, only trained specialists should clean or repair them. Wisconsin code requires licensed plumbers for any repairs.*
- ◆ *Discard any items that are damaged by contaminated water and cannot be steam cleaned or adequately cleaned and disinfected.*
- ◆ *Do not pump water out of basements too quickly. Exterior water pressure could collapse the walls.*
- ◆ *If sewage has backed up into the basement, clean the area and disinfect the floor with a chlorine solution of one-half cup of chlorine bleach to 1 gallon of water.*
- ◆ *Contact the county health department or county Extension office to obtain a drinking water test kit. (See the fact sheet "Water Contamination in Private Wells.") Do not drink the water until it has been tested and is safe.*

Additional resources:

Your county family living agent, your county code administrator, your local health department, the Wisconsin Bureau of Building Water Systems, Department of Industry, Labor and Human Relations.

Related publications:

UW-Extension publication "Care and Maintenance of Residential Septic Systems," (B3583).