

Managing Household Wastewater: *An Environmental Self-Assessment for Homes with Private Wells*



Before Completing Your Self-Assessment

This self-assessment of your household wastewater treatment system is an important part of keeping your wastewater treatment system working properly. You should complete it if you use a septic system or similar system to treat household wastewater. It will help you evaluate conditions around your home that could threaten your drinking water quality, and it can prove extremely valuable if you derive your drinking water from a private well. Please read this introductory information carefully before completing your self-assessment.

Your responses to this self-assessment are for your use. Although completing this self-assessment is voluntary, taking a few minutes to respond to it may help identify activities that could lead to septic system and/or water quality problems. You are encouraged to involve your spouse and/or children in completing your self-assessment. If you need other help or follow-up information, contact your county Extension office.

Managing Household Wastewater

Most rural homes use some type of septic system to treat household wastewater. These systems generally are economical and effective in treating these wastes. However, your septic system must be properly designed, installed, and maintained to reduce possible harmful impacts to the groundwater that supplies your drinking water, or to surface waters such as nearby streams.

A well-functioning septic system poses little risk to drinking water. A poorly operating septic system is a potential source of disease-causing bacteria, viruses, household chemicals, and nitrates. If significant amounts of any of these enter drinking water, they could produce health problems for you, your family, your pets and livestock, or your neighbors.

A properly designed and functioning septic system breaks down harmful bacteria. In some cases, local conditions may keep a septic system from performing as designed. For example, liquid in the septic system may flow to an area where water frequently pools near the surface, or the soil under the septic drain field may drain poorly. If this happens, the system may not completely treat wastewater, and you may unknowingly “recycle” poorly treated wastewater into your home with your drinking water.

To avoid problems, install your septic system in an approved location and maintain it properly. Install a new or

replacement septic system in well-drained, sandy soil and as far as possible from your well. Pump out your septic tank regularly to keep it working smoothly and extend the life of the system. Your septic system will work better and need less maintenance if you reduce the amount of wastewater and solids—such as food wastes and paper towels—entering the system. Throw away these solid wastes in your household garbage.

Septic System Regulations

To protect your drinking water quality, locate your septic system and all potential contamination sources as far as possible from your well. The Mississippi State Department of Health requires that new septic tanks be installed at least 50 feet from a well. Septic tank drain fields must be at least 100 feet from a well. Although an existing septic system closer to a well may be safe, it is important to maintain these systems properly. State health laws also require all household wastewater, including sink, tub, shower, and wash water, to enter the septic system. Discharging household wastewater off your property violates state health laws. Before installing a new septic system, check with your county health department for any additional requirements.

If you plan to install a new septic system or have questions about your existing system, contact the Mississippi State Department of Health—Division of On-site Wastewater, your county health department, or a licensed installer. If you have questions about your drinking water, contact your county health department or your county Extension office. Contact your county Extension office for information on maintaining your septic system or other water quality information. Contact information for these agencies is provided at the end of this publication.

Understanding Your Self-Assessment

Your drinking water is least likely to be contaminated by your septic system if you use as many of the low-risk practices in this self-assessment as you can reasonably follow. You may not be able to use all low-risk practices, but use as many as practical to protect your water quality. As you complete your self-assessment, do not be alarmed if you check several or even many high-risk statements. That does not automatically mean you have water quality problems. It could, however, mean your attention is needed to avoid potential problems.

Completing Your Self-Assessment

This self-assessment is a series of three-part statements, each with a **low**, **medium**, and **high** ranking. This ranking relates to the level of risk to your drinking water quality or other environmental risks associated with that activity or condition. First, read **all** statements in each set, and then check the ranking that **best** describes conditions around your home. Remember, this self-assessment is for your information, and your goal is to apply as many low-risk practices as you can.

Bold type means, in addition to being a high-risk practice, this activity violates Mississippi health or water quality laws. Always keep in mind that, although regulations are important, they should not be the only factor in decisions to protect drinking water quality. Many unregulated activities around your home or on your farm can affect water quality. Consider these regulations as *minimum safe requirements*, and locate your septic system and other pollution sources farther from your well if possible.

Level of Risk

Low () Your septic system (tank and drain field) is more than 100 feet downhill from a well or other water source.

Medium () Your septic system is more than 100 feet from and on the same grade with a well or other water source.

High () Your septic tank is less than 50 feet from a well or other water source or your septic drain field is less than 100 feet from a well or other water source.

Low () Your septic system is installed in deep, well-drained, sandy soil to allow full absorption of wastewater. The area around the system is well drained, and no water pools on the surface.

Medium () Your septic tank is installed in deep, medium-textured soil that drains reasonably well. No water collects near the area except in heavy rains.

High () Your septic tank is installed in shallow, coarse-textured, gravelly soil or in very fine clay soil that absorbs wastewater poorly. Water pools often near the septic system.

Low () No trees are within 50 feet of your septic tank drain field. You've never had a problem with roots in the drain field lines.

Medium () No big trees are within 25 feet of your septic tank drain field. You add a root inhibitor to your septic system as needed to control roots or cut roots to keep them from getting near drain field lines.

High () Trees or shrubs are 10 feet or less from your septic tank drain field. You've removed roots from drain field lines at least once and make no effort to prevent root regrowth.

Low () You have septic tank scum and sludge levels checked each year and your septic tank pumped out every 4 years or less.

Medium () You have scum and sludge levels checked every 2 years and your tank pumped out about once every 6 years.

High () You've never pumped out your septic tank, don't know if it has ever been pumped out, or don't remember the last year it was pumped out.

Low () No vehicles or farm equipment are ever driven over your septic tank or drain field.

Medium () You occasionally drive vehicles over your septic tank system but don't cross it with heavy farm equipment.

High () You often drive over your septic tank and drain field with vehicles and heavy farm equipment.

Low () Your home has water-saving faucets and you repair leaking faucets quickly. You also conserve water as much as possible.

Medium () Your home has no water-saving faucets, but you try to conserve water. You repair leaking faucets when you have time.

High () You generally aren't concerned with conserving water or repairing leaking faucets. Your home has no water-saving faucets.

Low () Your septic system is less than 10 years old.

Medium () Your septic system is 10 to 25 years old.

High () Your septic system is more than 25 years old or you don't know how old your septic system is.

Low () You put leftover food wastes in household garbage (not in your food disposal). You also don't put grease, oil, fat, or coffee grounds down your sink or flush paper towels, disposable diapers, or other products down the toilet.

Medium () You use a food disposal fewer than five times a week and put grease, oil, fat, or coffee grounds down your sink fewer than three times a week. You occasionally flush paper towels, disposable diapers, or other products down the toilet.

High () You use a food disposal daily and regularly put grease, oil, fat, or coffee grounds down the sink. You regularly flush paper towels, disposable diapers, or other products down the toilet.

Low () You help keep your septic system working properly by never disposing of toxic materials like paint, solvents, pesticides, or other materials in the system.

Medium () You dispose of toxic materials like paint, solvents, pesticides, and other materials in your septic system about once a year.

High () You dispose of toxic materials like paint, solvents, pesticides, and other materials in your septic system more than three times a year.

Low () Your septic system functions as intended and never "backs up" in your home.

Medium () Your septic system backs up in your home only once or twice a year.

High () Your septic system backs up in your home more than three times a year, indicating a clogged drain field or other problems.

Low () Wastewater from your sink, tub, shower, and wash enters your septic system along with other sewage.

Medium () Wastewater from your sink, tub, shower, and wash water enters an approved treatment area more than 100 feet downhill from a well or water source.

High () Wastewater from your sink, tub, shower, and wash water is **discharged with no treatment less than 100 feet from a well or is discharged off your property.**

Low () Your septic system works properly and sewage never comes to the ground surface.

Medium () You notice sewage from your septic system surfacing on your property about once or twice a year.

High () You often notice odors or sewage surfacing on your property, or **discharge from your septic system flows off your property, or you have no septic system to treat household wastewater.**

For More Information

Septic system regulations and installation guidelines:

Mississippi State Department of Health
Division of On-site Wastewater
805 South Wheatley Street, Suite 340
Ridgeland, MS 39157
(601) 991-6030

or

Your county health department
http://msdh.ms.gov/msdhsitel_static/19,0,166.html

or

A licensed installer

Questions about your water quality:

Your county health department
http://msdh.ms.gov/msdhsitel_static/19,0,166.html

or

Your county Extension office
<http://extension.msstate.edu/county-offices>

For other information about your septic system or water quality, contact your county Extension office.

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