

PROTECTING YOUR GROUND WATER THROUGH FARMSTEAD ASSESSMENT



A Self-Help Checklist

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Why You Should Care

Over 95% of North Dakota's rural residents depend on ground water for their drinking water supplies—most through the use of private wells. If you rely on a private well for your water, it is extremely important to make sure your water is safe to drink.

You can help protect your drinking water by learning to recognize potential sources of ground water pollution on your farmstead and working to reduce or eliminate them. If you live in an area where the soils are sandy or where the water table is within 20 feet of the surface, you should be particularly concerned because the potential for ground water contamination is greater in these areas.



What You Can Do

This checklist has been designed to make you aware of conditions or practices on your farmstead that increase the risk of ground water contamination. It is divided into six sections, so you can more easily identify particular situations on your farmstead that are putting your drinking water at risk. If you answer "yes" to any of these questions, you should consider (if possible) modifying your operations to reduce the risk of your ground water supply being contaminated. You should also begin testing your water regularly. Annual testing for bacteria and nitrate is recommended.



Assessing the Condition of Your Drinking Water Well

- YES NO
- □ □ Is your well shallow (0 to 50 feet deep)?
- Do you have a driven well or a dug well? (A driven well has a special point on the end, is driven in a series of short sections, and is usually less than 50 feet deep. A dug well is usually greater than 3 feet in diameter, less than 50 feet deep, and dug by hand.)
- □ □ Was your well constructed more than 50 years ago?
- $\hfill\square$ $\hfill\blacksquare$ Is there a depression around the casing of your well?
- Does the casing of your well extend less than 12 inches above the ground level?
- □ □ Can you see any cracks or holes in the casing of your well?
- □ □ Are there abandoned wells on your farmstead that have not been properly plugged?



Assessing Your Household Wastewater Treatment Practices

YES NO

- □ □ Is your septic tank or drain field less than 100 feet from your well?
- Do you fail to pump your septic tank out on a regular basis (about once a year if you have a garbage disposal or once every three years if you don't)?
- Do you commonly dump grease, oils, or leftover household chemicals that can adversely affect the performance of your septic tank down the drain?



Assessing Your Hazardous Waste Management Practices

- yes no
- Do you dispose of hazardous household chemicals such as furniture polish, paints, stains, and drain cleaners or their containers on your farmstead?
- Do you dispose of waste oil and grease, used antifreeze, or lead acid batteries on your farmstead?
- Do you dispose of unwanted or banned pesticides or pesticide containers on your farmstead?



Assessing Your Farm Chemical Storage and Handling Practices

YES NO

- Do you usually have more than I gallon or 10 pounds of each of the pesticides you use stored on your farmstead?
- Do you usually have more than I ton of dry fertilizer or 55 gallons of liquid fertilizer stored on your farmstead?
- Do you store chemicals with high leaching potentials or are you unsure of the leaching potentials of the chemicals stored on your farmstead? (Leaching potential is a chemical's tendency to move through the soil as a result of water movement.)
- □ □ Are chemicals stored on a permeable surface such as wood, gravel or dirt or on an impermeable surface with no curb?
- Do you have chemical containers that are rusting, have been patched, or have holes or tears?
- □ □ Are chemicals stored in an area exposed to activities that could damage containers or result in chemical spills?
- □ □ Are chemicals stored in a location that is unlocked and open to vandalism and children?
- Do you use a hydrant near your well or obtain water directly from your well to fill your sprayer tank?
- Do you fill your sprayer tank with a hose that does not have a check valve or put the hose in the tank so that it may be below the water line when filling?
- Do you leave your sprayer tank unattended when filling?
- Do you hand pour liquid chemicals?
- Do you mix/load chemicals up slope or less than 150 feet down slope from your well?
- Do you mix/load chemicals in an area which does not have a concrete pad with a curb to contain spills?
- Do you use or store farm chemicals in the vicinity of your well?
- Do you wash your sprayer tank out on the farmstead and dump the rinsate less than 150 feet from your well?



Assessing Your Petroleum Product Storage Practices

- YES NO
- Do you have a fuel storage tank less than 20 feet from your well?
- Do you have a fuel storage tank, of any type, more than 15 years old or a bare steel fuel storage tank more than 3 years old?
- □ □ Have you failed to inventory your fuel use or check your fuel storage tanks for leaks?
- □ □ Is protection against leaking or spills from your fuel storage tanks lacking, i.e., no catch basin or concrete catch pad and containment?



Assessing Your Livestock and Dairy Operations

- yes no
- Do you have livestock/poultry within 100 feet of your well?
- Do you store manure within 250 feet of your well?
- Does runoff from your livestock yard run near your well?
- Do you dispose of dead animals on your farmstead near your well?
- Do you store silage within 50 feet of your well?
- □ □ Is your silage stored on permeable soil?
- □ □ Is milk house wastewater discharged within 250 feet of your well?



For More Information

This checklist does not cover all of the practices of the farmstead that increase the risk of ground water contamination. If you have specific questions about protecting your drinking water, contact your local extension agent. They can discuss your particular concerns in greater detail.

Helping You Put Knowledge To Work