

**PROTECTING
YOUR
GROUNDWATER
THROUGH
FARMSTEAD
ASSESSMENT**

AE-1073 (Revised)

A Farmstead Checklist

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Why You Should Care

Over 95 percent of North Dakota's rural residents depend on groundwater 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 groundwater 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 groundwater contamination is greater in these areas.**

What You Can Do

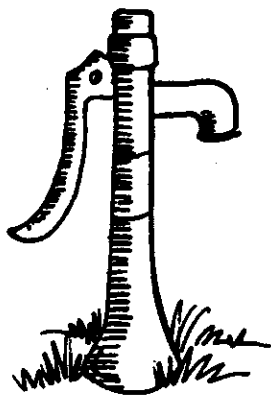
This checklist has been designed to make you aware of conditions or practices on your farmstead that increase the risk of groundwater contamination. It is divided into six sections, so you can more easily identify particular situations on your farmstead that are putting your drinking water at risk. A separate publication for each section is available to assist you with a more in-depth discussion on each question asked. These circulars are available at your local county extension office. **If you answer "Yes" to any of these questions, you should consider (if possible) modifying your operations to reduce the risk of your groundwater supply being contaminated.** You should also begin testing your water regularly. Annual testing for bacteria and nitrate is recommended.



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Assessing the Condition of Your Water Well and Its Location

YES NO

- 1. Is your well shallow (less than 50 feet deep)?
- 2. Do you have either 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.)
- 3. Was your well constructed more than 50 years ago?
- 4. Is there a depression around the casing of your well?
- 5. Does the casing of your well extend less than 12 inches above the ground level?
- 6. Is your wellhead located in a pit?
- 7. Can you see any cracks or holes in the casing or cover of your well?
- 8. Are there abandoned wells on your farmstead that have not been properly plugged?

Please refer to Extension Circular AE-1074 Assessing the Condition of Your Water Well and Its Location for more help if you answered "Yes" to any of the preceding questions.

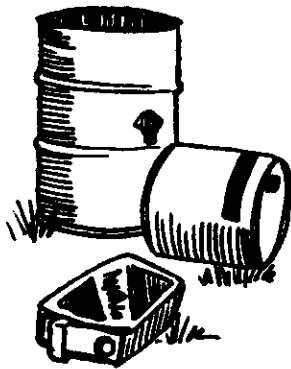


Assessing Your Household Wastewater Treatment Practices

YES NO

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

Please refer to Extension Circular AE-1075 Assessing Your Household Wastewater Treatment Practices for more help if you answered "Yes" to any of the preceding questions.



Assessing Your Hazardous Waste Management Practices

YES NO

- 1. Do you dispose of hazardous household chemicals such as furniture polish, paints, stains, and drain cleaners or their containers on your farmstead?
- 2. Do you dispose of waste oil and grease, used antifreeze, or lead acid batteries on your farmstead?
- 3. Do you dispose of unwanted or banned pesticides or pesticide containers on your farmstead?

Please refer to Extension Circular AE-1076 Assessing Your Hazardous Waste Management Practices for more help if you answered "Yes" to any of the preceding questions.

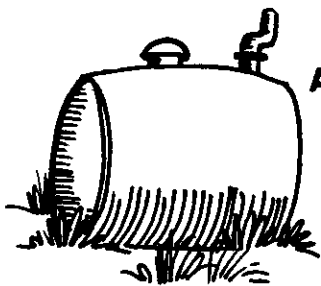


Assessing Your Farm Chemical Storage and Handling Practices

YES NO

- 1. Do you store pesticides on your farm?
- 2. Do you store fertilizer on your farm?
- 3. Are chemicals stored on a permeable surface such as wood, gravel or dirt?
- 4. Are chemicals stored in an area without a containment curb?
- 5. Do you have pesticide containers that are rusting, have been patched or have holes or tears?
- 6. Do you use or store farm chemicals within 150 feet of a well?
- 7. Are chemicals stored in an area exposed to activities that could damage containers or result in chemical spills?
- 8. Are chemicals stored in a location that is unlocked and open to vandalism and children?
- 9. Do you fill your sprayer tank directly from your well?
- 10. 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 is below the water line during filling?
- 11. Do you leave your sprayer tank unattended when filling?
- 12. Do you mix/load chemicals up slope or less than 150 feet from your well?
- 13. Do you mix/load chemicals in an area which does not have a concrete pad with a curb to contain spills?
- 14. Do you wash your sprayer tank out on the farmstead and dump the rinsate less than 150 feet from your well?

Please refer to Extension Circular AE-1077 Assessing Your Farm Chemical Storage and Handling Practices for more help if you answered "Yes" to any of the preceding questions.

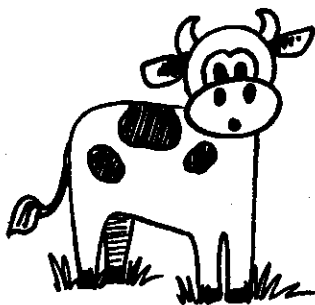


Assessing Your Petroleum Product Storage Practices

YES NO

- 1. Do you have an underground fuel storage tank?
- 2. Do you have a fuel storage tank less than 20 feet from your well?
- 3. 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?
- 4. Have you failed to inventory your fuel use or check your fuel storage tanks for leaks?
- 5. Is protection against leaking or spills from your fuel storage tanks lacking, i.e., no catch basin or concrete catch pad and containment?

Please refer to Extension Circular AE-1078 Assessing Your Petroleum Storage Practices for more help if you answered "Yes" to any of the preceding questions.



Assessing Your Livestock and Dairy Operations

YES NO

- 1. Do you have livestock/poultry within 100 feet of your well?
- 2. Do you store manure within 250 feet of your well?
- 3. Does runoff from your livestock feedyard run near your well?
- 4. Do you dispose of dead animals on your farmstead near your well?
- 5. Do you store silage within 50 feet of your well?
- 6. Is your silage stored on permeable soil?
- 7. Is milk house wastewater discharged within 250 feet of your well?

Please refer to Extension Circular AE-1079 Assessing Your Livestock and Dairy Operation for more help if you answered "Yes" to any of the preceding questions.

For More Information

This checklist does not cover all of the practices of the farmstead that increase the risk of groundwater 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.



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