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TREATMENT OF HOUSEHOLD WASTEWATER

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FARM*A*SYST Farm/Ranch Self-Assessment System for Arizona

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This fact sheet is taken from the Arizona Farm*A*Syst workbook. Farm*A*Syst is a voluntary groundwater pollution prevention program designed for farmers and rural residents. The goals of the program are to help rural residents: understand potential causes of groundwater contamination, identify farmstead management practices that pose risks to groundwater, and develop a plan to reduce those risks.

Almost all farm homes use a septic tank system or similar on-site wastewater system to treat household wastewater. These systems are usually economical and safe. But, they must be able to safely handle *all* wastewater produced by your household and must treat wastewater adequately to prevent contamination of groundwater and surface water.

Household wastewater contains bacteria, infectious viruses, household chemicals, and excess nutrients such as nitrate. All of these contaminants can cause serious health problems, including gastrointestinal illnesses and hepatitis. Your well water should be tested regularly for coliform bacteria. If coliform bacteria are present, your drinking water may also contain other microorganisms that can be harmful. A septic system that is not operating properly may be the source of drinking water contamination.

The amount of wastewater generated by your household can be too much for your wastewater system to treat efficiently. Any resulting leaks or overflows can reduce the quality of nearby surface or groundwater supplies.

What can you do?

- 1. Make sure your septic system is large enough to meet your needs. Check with the county health department or Arizona Department of Environmental Quality (ADEQ) to determine the correct size for your household. Look for ways to reduce the amount of wastewater that enters the septic system.
- 2. Test your drinking water once or twice a year for coliform bacteria.
- 3. Protect your health and the quality of your drinking water by disposing of contaminants properly, not into the septic system.
- 4. Keep your septic system in good repair. Properly functioning tank systems *may* only need to be pumped every 10 to 12 years.

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1. Quantity of wastewater; indoor water use.	a. Water-conserving fixtures are used throughout home, fixtures inspected regularly, and leaks repaired quickly.		
	b. No water-conserving fixtures, and no inspections.		
2. Distance of system to well.	a. More than 100 feet.		
	b. Less than 100 feet.		
3. Location of dis- posal system.	a. Located more than: 50 feet from property lines, 10 feet from buildings, and surface water drains away from disposal system.		
	b. Located <u>less</u> than the above distances, and surface water drains <u>toward</u> disposal system.		
4. Inspection of disposal system.	a. Soil always firm, and no odors.		
	b. Ground wet and/or spongy, and noticeable odors.		

The questions listed above can help you determine whether your household wastewater treatment system may pose a risk to groundwater.

Take a few minutes to complete the questions. If you answered **yes** to mostly **"a"** questions, your ground-water is probably safe from becoming polluted from your wastewater treatment system. If you answered **yes** to mostly **"b"** questions, then your groundwater may be at high risk of becoming polluted.

Worksheet number seven in the Farm*A*Syst book will give you a more complete assessment of your household wastewater treatment system. If you are interested in obtaining a copy of Arizona's Farm*A*Syst workbook, please contact the College of Agriculture's Publications Distribution Center, 4042 North Campbell Avenue, Tucson, Arizona 85721. The office phone number is (520) 621-1713 and the FAX number is (520)795-8508. The cost of the workbook is \$5.00 plus shipping. Contact your county extension office or NRCS office if you have questions about how to use the workbook.