

A voluntary program to assist private drinking well users evaluate and modify practices to protect their drinking water supply

Cistern Management

Why should you be concerned?

The condition of your cistern is an important factor to consider when looking at the potential for contamination of your drinking water supply. Specifically, you should be concerned about the location, condition, and maintenance of your cistern.

Evaluate the condition of your cistern by answering the following questions.

- 1. Has it been longer than three years since your cistern was emptied and cleaned?
- 2. Has it been longer than four months since you treated your cistern with chlorine?
- 3. Has it been longer than 2 years since you inspected your cistern for cracks or leaks?

If you answered "yes" or you do not know the answer to any of these questions, use this worksheet to address those issues. The information will help you develop a voluntary plan of action to reduce the contamination risks to your cistern.

1. Has it been longer than three years since your cistern was emptied and cleaned?

Your cistern should be emptied and cleaned every three to five years to remove sediment deposits. This minimizes the amount of coliform bacteria and other contaminants in your water supply.

2. Has it been longer than four months since you treated your cistern with chlorine?

Add chlorine to your system on a regular basis to disinfect your water supply. Treat cistern water with five fluid ounces of liquid unscented chlorine bleach (5.25% sodium hypochlorite, regular laundry bleach) per 1,000 gallons of water monthly or bimonthly, depending upon the frequency and amount of rainfall.

As a general rule, add one ounce of chlorine per 400 gallons of water during wet periods and one ounce of chlorine per 200 gallons of water in dry periods. Contact your county health department for more information on how to disinfect your cistern.

3. Has it been longer than two years since you inspected your cistern for cracks?

Pollutants from septic systems, livestock areas, or a leaking petroleum or chemical storage tank can enter cisterns through cracks, polluting your drinking water supply. Any leaks in the cistern should be filled and sealed. You should inspect your cistern system for any vents or holes where an animal may enter.

4. Is your roof or collection area covered with a toxic material?

Many roof coatings, paints and collection materials can contain toxic substances such as zinc, copper, and lead that can contaminate your cistern water. For example, galvanized roofing is a source of zinc, roofs with copper flashing can have high copper and lead concentrations, and some roof coatings contain lead. You should consider treating or replacing these materials with coatings or components that are made from nontoxic materials.



Glossary

contaminant

a substance which makes another substance impure or unsuitable for its original use; may include a chemical material, organic material, live organism, radioactive material or heated or cooled water

sediment

material deposited by water; the term is also defined as any matter that settles to the bottom in a liquid

Contacts

USDA Natural Resources Conservation Service, Colorado State Office (303) 236-2886

CSU Cooperative Extension, State Office (970) 491-6172

Colorado Department of Public Health and Environment, Water Quality Control Division (303) 692-3500

Colorado Association of Soil Conservation Districts (303) 232-6242

Well-A-Syst Worksheets

Private Drinking Water Well Management Cistern Management Site Assessment Septic System Management Household Hazardous Waste Management Livestock Management Fertilizer Management Pesticide Management Petroleum Storage Management

Well*A*Syst is a joint project developed for Colorado by the USDA Natural Resources Conservation Service; Colorado State University Cooperative Extension; Colorado Department of Agriculture; the Colorado Department of Public Health and Environment, Water Quality Control Division; the Colorado Department of Natural Resources, State Soil Conservation Board; and the U.S. Environmental Protection Agency.

Illustrations used in this publication are taken from *Home*A*Syst: An Environmental Risk Assessment Guide for the Home,* developed by the National Farm*A*Syst/Home*A*Syst Program, in cooperation with NRAES, the Northeast Regional Agricultural Engineering Service. Permission to use these materials was granted by the National Farm*A*Syst/Home*A*Syst Office.

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	Assessing the	e Condition of Ciste	rn
If you answered "Yes" or did not know the answer to the previous questions	What to do	Who to call	What you did
-	Clean cistern every 3–5 years.	County health department; Natural Resources Conservation Service; CSU Cooperative Extension; Soil Conservation District	
2	Use chlorine at regular interval to disinfect water supply.	County health department; Natural Resources Conservation Service; CSU Cooperative Extension; Soil Conservation District	
£	Inspect cistern and repair all leaks and cracks.	County health department; CSU Cooperative Extension; Natural Resources Conservation Service; Soil Conservation District	
4	Test your drinking water for toxic chemicals. Treat or replace coatings or components with nontoxic materials.	County health department; Water Quality Control Division	