

Your Actions Can Help Protect Our Drinking Water



Janie Harris*

Your actions in and around your home can help protect the safety and quality of your drinking water. Every day Americans drink more than 1 billion glasses of water. That amount is in addition to the other uses for water in our homes, such as cleaning, cooking, bathing and mixing baby formula.

Most U.S. drinking water is safe. Our public water supply is safeguarded by the Environmental Protection Agency, the State of Texas and local water systems. But if your water comes from a well or other private supply, it is up to you to make sure that your drinking water is safe.

Protecting our drinking water is everyone's responsibility. Individuals, businesses, agricultural enterprises, citizens organizations, and local and state governmental agencies must work together to ensure that our water is safe to drink.

The best way to be assured of safe drinking water is to prevent it from becoming contaminated in the first place. Your actions in and around your home can affect the quality of water, both below the ground and in surface water of nearby lakes, rivers, streams, springs, wetlands or coastal ponds.

Many materials used or produced around homes can contribute to water pollution:

- If animal or human waste is not treated properly, too much nitrate can seep into water supplies.
- Other harmful chemicals—such as pesticides, fertilizers, gas or oil—that are dumped or spilled near a water source can contaminate water.
- Water can also be polluted by hazardous household products such as cleaning agents, paints and solvents.

Most households have many products that could damage our water supply if they were handled improperly. General categories of home products that are hazardous include:

- **Pesticides:** Insecticides, fungicides, weed killers, slug bait, rose dust, mothballs, wood preservatives, flea and roach powder, and empty pesticide containers.
- Household cleaners: Furniture polish, some bleaches, some drain openers, and oven and toilet bowl cleaners.
- Automotive products: Antifreeze, motor oil, brake fluid and wet cell (lead-acid) batteries.
- **Paints and solvents:** Turpentine, paint thinner, rust remover, furniture stripper, oil-base paints and other solvents.
- **Miscellaneous:** Medicines, pool chemicals, fluorescent light fixtures, hobby and craft chemicals, and photography and lab sets.

When planning to use hazardous household products, consider three key points: how best to choose, buy and use these products; how to store them safely; and how to dispose of them properly.

Product selection, purchase and use

Choose the products that meet your needs most safely. When you are shopping, always read the instructions on the product labels. Labels provide information on a product's contents as well as instructions on how to use it safely. Check to see if the product contains ingredients that, when used improperly, can harm people or the environment.

Manufacturers know about consumer safety issues, and many companies offer a range of products that serve the same purpose. If you need more information about a product than is provided by the label,

^{*}Extension Housing and Environmental Specialist, The Texas A&M University System

request a Material Safety Data Sheet (MSDS) from the manufacturer (phone numbers are usually listed on the labels), or consult a Poison Control Center (1-800-764-7661).

Buy only the amount of household product that you need for the job. Then, use the product according to the manufacturer's instructions listed on the label.

Safe storage

Labels also provide information on how to store hazardous household products safely.

General guidelines include:

- Keep hazardous household products out of the reach of children and pets, preferably in a locked, secure area.
- Store each product in its original container.
- If you must transfer a product into another container, write clearly on the container what its contents are and when the product was purchased.
- Keep containers dry and sealed tightly.
- Store the products at least 150 feet from a well or waterway.
- Keep the products in a well-ventilated area and away from sources of ignition.
- Store batteries and flammable chemicals in an area shaded from direct sunlight.

Safe disposal

Ideally, you can avoid having to dispose of hazardous products by buying and using only what you need, using up your leftovers, or recycling.

But if you must dispose of a product, first read the label. It will provide information on how to dispose of the product safely.

Some products can be poured down the drain with plenty of water. However, if you have a septic system, take special care. Some products can disrupt a septic system.

Other products cannot be poured down the drain, but can be taken to a sanitary landfill if they are in proper containers.

Some products should be saved for a community collection day or delivered to a licensed hazardous waste contractor. If you have a recycling program in your community, some products (such as used motor oil) can be taken there.

Never burn or dump leftover products or containers on the ground.

Each person's household habits can affect our environment. Such practices as dumping motor oil down the storm drain after a do-it-yourself oil change or applying too much fertilizer to the yard can damage groundwater quality as well as stream and lake quality because of surface runoff contamination.

Guidelines for handling hazardous household products

The U.S. Department of Agriculture, Cooperative Extension Service Home*A*Syst Program offers these specific tips on protecting our environment and water supply:

Do not:

- Dump oils, paints, pesticides or any other household chemicals on the ground, on roads or down storm sewers.
- Dump products in a wetland, stream or any other body of water.
- Wash chemicals off the driveway with a hose.
- · Pour pesticides or non-water-soluble chemicals into a drain that leads to a septic system.
- Spray pesticides on a windy day.
- Burn containers in a barrel or outdoor fire.

Do:

- Use all of a product according to label directions.
- Keep products in original container with directions on it.
- Share any leftovers with a neighbor or local organization.
- Find out if a product can be recycled and where to recycle it in your community. If so, recycle leftover products.
- Find out if your community has a hazardous waste collection program. If so, take household hazardous wastes to the community collection point.

Resources

- *Help Yourself to A Healthy Home* is a 24-page booklet that can help you make sure that your home is a safe and healthy place to be. It is available in English and Spanish on the Web at *http://www.uwex.edu/ homeasyst/*
- The Home*A*Syst program helps you identify potential risks to your family's health and the environment. Home*A*Syst is a national program supported by the USDA Cooperative State Research, Education and Extension Service, USDA Natural Resources Conservation Service, and U.S. Environmental Protection Agency. This environmental riskassessment guide is available at http://www.uwex.edu/homeasyst/
- B-1655, *Drinking Water and Health,* a publication produced by the Texas Agricultural Extension Service. It is available at *http://agpublications.tamu.edu/catalog/index.html*

- L-5056, Household Hazardous Waste Management, a publication produced by the Texas Agricultural Extension Service. It is available at http://agpublications.tamu.edu/catalog/index.html
- The ICMA Source Water Awareness Media Tool Kit contains a media campaign strategy to help a community increase the awareness of drinking water source protection. Provided by the International City/County Management Association, it is available at http://www.lgean.org/ html/_tooldetail.cfm?id=43

Acknowledgment

This fact sheet was reviewed by Mark McFarland, Dana Porter and Judy Warren at Texas Cooperative Extension.





Produced by AgriLife Communications and Marketing, The Texas A&M University System Extension publications can be found on the Web at: http://AgriLifebookstore.org

Educational programs of Texas AgriLife Extension are open to all people without regard to race, color, sex, disability, religion, age, or national origin.

Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended, and June 30, 1914, in cooperation with the United States Department of Agriculture. Edward G. Smith, Interim Director, Texas Cooperative Extension, The Texas A&M University System.