



Water is Life : Quality Matters



# HOW TO PROTECT YOUR WATER FROM HAZARDOUS WASTE

Fact Sheet 5  
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Waste products are an inevitable result of daily living. While some types of waste are harmless, a significant number are potentially hazardous to our health and the environment. Waste products are hazardous if they are toxic, corrosive, flammable or explosive. The federal government identifies over 500 specific materials as hazardous wastes.

The table below lists some common hazardous materials found around the home and farmstead or acreage. Even a small amount of these materials can contaminate ground or surface water and can be very difficult to clean up. This fact sheet provides guidelines for proper handling and disposal of these materials to prevent water contamination.

## EXAMPLES OF HOME AND FARM HAZARDOUS WASTES

- solvents, spot removers and dry cleaning fluids
- pesticides
- oil and lead based paint, turpentine, stains, finishes, paint strippers and wood preservatives
- tires and car batteries, used oil filters
- household cleaners
- ash from burned trash and sludge from burned waste oil
- gasoline, antifreeze and used motor oil
- flea powder and veterinary waste
- photography chemicals
- asbestos

Sometimes it's difficult to determine whether a substance is hazardous. Contact your local health department or the Department of Environmental Quality, Division of Solid and Hazardous Waste for more information. Contact information and additional reading materials are listed at the end of this fact sheet.



# GUIDELINES FOR PROTECTING YOUR DRINKING WATER AND OTHER WATER RESOURCES

## Prevent Pollution Before It Starts

Prevent problems with hazardous materials by reducing the amount you use. Look for products that can do the same job with less hazardous materials. To avoid storage problems, buy only the amount of materials you can use quickly. Recycle materials when possible. Collect spilled materials for reuse, and absorb small drips and spills with “floor dry” or cat litter.

## Storage and Use of Hazardous Materials

Read product labels and always use hazardous materials according to the manufacturer’s

instructions. Store all hazardous materials in a well marked storage area which is locked and secure from children or vandals. Make sure the storage area is well-ventilated. As a rule of thumb, if you can smell your products, ventilation is inadequate to protect your health.

Separate flammable, poisonous, and corrosive materials to avoid accidental chemical interactions. Store hazardous materials in clearly labeled containers (never use old food containers) and frequently inspect containers for leaks. Remember that rags used to clean up solvent spills are a fire hazard and must be stored with the same care as the hazardous materials.

### **TAKE ACTION!**

Take an inventory of hazardous materials you use or store. Know where they are located and how much you have. Keep the inventory up-to-date. A set of well maintained records are invaluable in case of fire or other events where wastes may be released into the environment.

## PROTECT YOUR WELL & WATER RESOURCES

Hazardous waste contamination of water resources threatens the health of humans and animals. Contaminated water used for irrigation purposes may also damage plants. Because clean up of contaminated water is expensive and may not be possible, it is always best to take preventative actions that protect your water resources from any possible contamination.

- Use and store hazardous wastes away from water resources (at least 150 feet from a well or surface water) to prevent contamination from accidental spills or leaks.
- Do not store any chemical or item containing chemicals inside a well house.
- Do not mix chemicals or clean containers near a well or surface water.
- Seal floor drains in workshops or garages where hazardous materials may be spilled on the floor.
- NEVER use abandoned well pits for disposal or storage of chemical containers or other hazardous waste.
- NEVER dump wastes down drains leading to a sewer or septic system, ditches, streams or other waterways.

## HAZARDOUS WASTE LAWS AND REGULATIONS

Households in Utah are exempt from and not directly governed by hazardous waste law. Under federal hazardous waste regulations, farmsteads or acreages may be considered “conditionally exempt.” “Conditionally exempt” operations are not required to obtain an EPA identification number or a manifest form for waste disposal. However, waste still needs to be disposed of at a licensed hazardous waste facility.

An operation is “conditionally exempt” if it accumulates less than 2.2 pounds of **acutely hazardous waste** or less than 220 pounds of **hazardous waste** per month and never stores more than 2,200 pounds of hazardous waste on-site. See A Guide for Small Businesses (listed in the Contacts and References section), or contact the Utah Division of Solid and Hazardous Waste to determine which hazardous waste category you are in. Note that some pesticides commonly used by farmers are listed as acutely hazardous waste in federal statutes. Therefore, farmers who accumulate more than 2.2 pounds of these leftover pesticides need to acquire an EPA identification number and use the manifest system to dispose of waste.

## VEHICLE MAINTENANCE

One of the largest sources of hazardous waste on many farmsteads and acreages is from vehicle maintenance. Equipment maintenance areas should be located away from wells and surface water. Make sure any hazardous materials are contained and drainage from the maintenance area is contained or directed away from wells or surface water. Do not “flush” the area with solvents to keep it free of oil and grease. Capture spills and drips, and use absorbent materials to clean up waste.



## DISPOSING OF HAZARDOUS WASTE

Disposal and recycling opportunities vary across the state. Some counties have full time household hazardous waste collection stations at their county licensed landfills. Other communities have periodic community collection days. There are several EPA approved hazardous waste facilities in Utah; some are listed in the Contacts and References section at the end of this fact sheet and others can be found in the yellow pages. Burning hazardous waste on farmsteads is illegal. Hazardous wastes can be burned only by federally licensed incinerators. For more information on disposal and recycling opportunities in your area, see the Contacts and References section in this fact sheet.

### **TAKE ACTION!**

Many hazardous wastes can be disposed of at local collection facilities or special hazardous waste collection days. Check with your county Health Department, your local landfill or solid waste facility for scheduled collection days and for more information.

## **Disposal Guidelines for Specific Hazardous Wastes**

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Much of the hazardous trash generated from your house, including turpentine, latex and oil based paints, cleaning materials and pesticides such as flea powder can be disposed of at a hazardous waste collection site. Follow disposal guidelines for the specific hazardous wastes listed below.

**Acids & Bases:** Items like muriatic acid, battery acid, nitric acid, and hydrofluoric acid can cause severe eye and skin damage. Try using your acids and bases according to label directions and dispose of them through a private hazardous waste company.

**Antifreeze:** Antifreeze contains ethylene glycol and is poisonous to humans and animals. Used antifreeze that is not contaminated with oil or other materials can be recycled. Check with your local service station. Contaminated antifreeze must be treated as a hazardous waste. Do not put antifreeze down a septic system.

**Ash & Sludge:** Ash and sludge from waste oil burners may contain heavy metals. Take this material to a landfill for disposal.

**Asbestos:** Asbestos fibers that can be inhaled or ingested are a toxic material requiring careful handling. Many types of asbestos-containing materials, such as floor tiles or asphalt-based siding and roofing materials, have little potential to yield

fibers in a powder or dust during removal and disposal. These may be sent to a landfill as solid waste. Asbestos cement (transite) or slate board roofing is dangerous and must be packaged, labeled and taken to a landfill that accepts this material. If other asbestos-containing materials are in good condition (not peeling, cracking or crumbling) leave them alone. If removal is necessary contact your local health district or the Department of Environmental Quality, Division of Air Quality.

**Car Batteries:** Each car, ATV, motorcycle or boat battery can contain 18 pounds of lead and one pound of sulfuric acid. Recycle batteries at local automotive stores or recycling centers. If you buy a new battery, you can trade in the old battery.

**Dead Animals:** Bury animals far from wells, ditches, creeks, rivers and other bodies of water for public health and pollution reasons. Other methods of animal disposal include rendering or pick up service where available, landfilling (check regulations with your local landfill), or composting. For more information, see the Contacts and References section of this Fact Sheet.

**Motor Oil Filters:** Drain filters of used oil by puncturing the anti-drain back valve on the flat bottom end. If the filter doesn't have a back valve on the bottom, try puncturing a hole in the dome end. Place the punctured end down and drain the filter for 12 hours. The filter will drain best when it is still warm from the engine. Wrap the drained filter in newspaper and place it with regular trash. Some places recycle filters. Follow guidelines below to dispose of the used oil.

**Oil Based Products:** Lead paint, turpentine, paint thinner, varnish and filters from a paint booth can be flammable or toxic. Use up materials if possible and dispose of excess at a hazardous waste collection facility.

**Old Fuels:** If fuel such as diesel, gasoline, kerosene or fuel oil can't be used up, take them to a private hazardous waste firm.

**Paint, Varnish, Stain, Paint Stripper:** Latex or water based paint and stain, less than ten years old, can be air dried or solidified with an equal amount of clay cat litter and taken to a landfill or put out for trash pickup.

**Pesticides and Banned Pesticides:** Take pesticides that can't be used up to a special hazardous waste collection event or dispose of through a private hazardous waste firm. Old pesticides that have been in storage for many years should be placed in secondary containment until they are properly disposed. Many older pesticides are no longer registered for use. Spills of these chemicals are dangerous and can result in expensive cleanup. Refer to Fact Sheet 2 in this series, *How to Protect Your Water from Pesticide Contamination*, for more information about safe handling and disposal of pesticides.

**Solvents:** Parts-washing solvents, cleaning solvents and similar materials can be disposed of through a private hazardous waste disposal company. Renting a parts washer can be a good option for some operations and avoids the problem of solvent disposal by the individual homeowner or farmer.

**Tires:** Disposal of used tires is difficult because there are few options. Although a common practice, burning tires on a farm is unsafe. A tire burns very hot for a long time and releases toxic gases. Tires should be returned to the equipment/vehicle dealer who will chop them up and send them to a landfill or utility where tires are burned with coal to produce energy. The dealer will charge a disposal fee based on the size of the tire.



**Used Motor Oil:** You may recycle used motor oil at the local agricultural chemical dealer or oil change station. Oil can be burned in an approved furnace for heat. If the oil is contaminated with anything, such as solvent, kerosene or other materials, it must be treated as a flammable hazardous waste. Land spreading of waste oil is not allowed.

**Veterinary Medical Waste:** Check to see if you can return unused medical waste like antibiotics to your veterinarian. Call your extension educator for other options. Most special collection days for hazardous waste do not take medical waste. Place items like syringes in a heavy plastic container with a lid, marked clearly, and take to a landfill.

**Wood Preservatives:** Products used to protect wood are usually flammable and some are poisonous. Dispose of these at a hazardous waste disposal site or on a hazardous waste cleanup day.

# CONTACTS AND REFERENCES

## GENERAL INFORMATION

Utah Division of Solid and Hazardous Waste:  
(801) 536-0200 or on the web at  
<http://www.eq.state.ut.us/EQSHW/dshw-1.htm>.

## HEALTH CONCERNS

### LOCAL HEALTH DISTRICTS:

Find the number in your local phone book under county listings or on the web at  
<http://www.drinkingwater.utah.gov/partners.htm>

### UTAH DEPARTMENT OF HEALTH:

(801) 538-6003 or on the web at  
<http://health.utah.gov/>

**UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY -**  
Environmental Hotline: (800) 458-0145.

**UNIVERSITY OF UTAH HEALTH SCIENCES CENTER:**  
on the web at <http://healthcare.utah.edu/>

For questions about poisoning call your physician or the Rocky Mountain Poison Center-Utah Poison Control Center: (800) 222-1222.

## A SPECIFIC PRODUCT

The company's phone number is frequently on the label.

Chemtrec, sponsored by the Chemical Manufacturers' Association: (800) 262-8200  
or on the web at [www.chemtrec.com](http://www.chemtrec.com).

## IDENTIFICATION AND DISPOSAL OF HAZARDOUS WASTES

**UTAH DIVISION OF SOLID AND HAZARDOUS WASTE:**  
(801) 538-6170 or on the web at: <http://www.hazardouswaste.utah.gov/Rules/HazardousWasteRule.htm>

### COUNTY LANDFILL:

Find contact information in your local phonebook. A list of Utah landfills is available from the Utah Division of Solid and Hazardous Waste at  
[http://www.hazardouswaste.utah.gov/Solid\\_Waste\\_Section/permittedsolidwastelandfills.htm](http://www.hazardouswaste.utah.gov/Solid_Waste_Section/permittedsolidwastelandfills.htm).

### LOCAL HEALTH DISTRICTS:

Find the number in your local phonebook under county listings or on the web at  
<http://www.drinkingwater.utah.gov/partners.htm>.

### EPA APPROVED HAZARDOUS WASTE DISPOSAL SITES:

Ashland Distribution, Freeport Center Clearfield, UT 84015: (800) 637-7922.

Univar, 650 W. 800 S. Salt Lake City, UT 84104: (800) 669-8978 or (801) 328-1112.

Clean Harbors Environmental Service, 2150 North 470 East, Tooele, UT 84074: (435) 843-4840.

US Ecology, 2627 Cherry Park Ln, South Jordan, UT 84095: (800) 695-1195 or (801) 256-3450.

Find Hazardous Waste Contractors in your local yellow pages. Check on contractor's experience and records with the Utah Department of Environmental Quality: (801) 536-4400.

## PESTICIDES AND OTHER AGRICULTURAL CHEMICALS

### NATIONAL PESTICIDE INFORMATION CENTER:

(800) 858-PEST (7378) or on the web at  
<http://npic.orst.edu>.

### UTAH DEPARTMENT OF AGRICULTURE AND FOOD:

(801) 538-7100 or on the web at [www.ag.utah.gov](http://www.ag.utah.gov).

*How to Protect Your Water from Pesticide Contamination (WQFA 3)* Utah State University Extension Publication: (435) 797-2251 or at  
<http://extension.usu.edu/cooperative/publications> (search by call number)

Contact your Utah State University Extension county agent through your local phonebook or (435) 797-2200 or on the web: <http://extension.usu.edu/htm/counties>.

## REMOVAL/BURIAL OF DEAD ANIMALS

State of Utah Department of Agriculture and Food:  
Division of Animal Industry: (801) 538-7166 or on the  
web at <http://ag.utah.gov/divisions/animal/index.html>

*How to Protect Your Water from Petroleum Based Fuels*  
(WQFA 7) Utah State University Extension Publications:  
(435) 797-2251 or at [http://extension.usu.edu/  
cooperative/publications](http://extension.usu.edu/cooperative/publications) (search by call number)

## MORE READING:

### HOUSEHOLD HAZARDOUS WASTE DISPOSAL

*A Guide to Household Hazardous Waste* at [http://www.haz-  
ardouswaste.utah.gov/Docs/GUIDE1a.pdf](http://www.hazardouswaste.utah.gov/Docs/GUIDE1a.pdf)

*Hazardous waste brochures from the Dept. of Environmental*  
*Quality:* Division of Solid and Hazardous Waste:  
(801) 536-0200 or on the web at  
[www.hazardouswaste.utah.gov/programs.htm](http://www.hazardouswaste.utah.gov/programs.htm).

## COMPOSTING

*Composting:* (HG H08)  
Utah State University Extension Publications:  
(435) 797-2251 or at  
<http://extension.usu.edu/cooperative/publications>  
(Search by call number)

*Backyard Composting in Utah* (HG-Compost-01)  
Utah State University Extension Publications:  
(435) 797-2251 or at  
<http://extension.usu.edu/htm/publications>  
(Search by call number)

## OTHER QUESTIONS?

Contact USU Extension's Water Quality Program:  
(435) 797-2580. or on the web at  
<http://extension.usu.edu/waterquality/>.

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# GLOSSARY

These definitions may help clarify some terms used in this Fact Sheet and may also help you make more accurate assessments when completing the Utah Farmstead Assessment for Ground Water and Surface Water Protection Survey 5 (Landowner's Survey: What's the risk to your water from hazardous waste?)

**ACUTELY HAZARDOUS WASTE:** Waste that the Environmental Protection Agency has determined to be so dangerous in small amounts that they are regulated the same way as large amounts of other hazardous waste.

**HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAM:** A special program in which a community collects waste for disposal in a specially constructed hazardous waste landfill or incinerator.

**INCINERATOR (MUNICIPAL):** A community incinerator specifically engineered to burn municipal quantities of home waste.

**LICENSED LANDFILL:** Also called a sanitary landfill. A landfill specifically designed to protect ground water through the use of a high quality clay or clay/impermeable film liner, accompanied by a system of buried pipes to collect any liquids generated to meet state standards.

**ON-FARM DISPOSAL:** Any method of burning, dumping or land spreading of wastes on the farm. Also includes use of the septic system for disposal. These methods all risk contamination of water and air, and may threaten human health. Many are illegal.

**RECYCLING:** Reusing waste materials to develop another product.

**SECONDARY CONTAINMENT:** A system, such as a sealed basin and dike, that will catch and hold the contents of a tank if it leaks or ruptures.



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