Water Quality Protection

SAFE AND HEALTHY LIVES
IN SAFE AND HEALTHY
COMMUNITIES

Rhode Island Department of HEALTH

UNIVERSITY OF Rhode Island

Residential Series
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Household Hazardous Products

RHODE ISLAND IS A STATE RICH IN WATER RESOURCES. From our freshwater lakes and ponds, rivers and streams, and abundant groundwater resources to our coastal ponds, estuaries, Narragansett Bay, and the Atlantic Ocean, our water resources sustain our livelihood. Our land use activities affect the quality of these water resources. There are many things that each of us can do to protect water resources. In this factsheet, we focus on Household Hazardous Products.

What Is A Household Hazardous Product?

We all use a variety of household products that are potentially hazardous—pose a potential risk to people, animals and the environment **(See Table 1 on page 3)**. Many cleaning products, solvents, and pesticides contain moderately to highly toxic chemicals, which can be a threat to our health and environment. The average home can collect as much as 100 pounds of household hazardous waste. The dangers of improper use, storage, and disposal of these hazardous products is an issue of growing concern. For each chemical or product, there are many questions to consider. Which products best meet your needs? Are there safer alternatives? What is the best way to store it? How can you use it safely? What are the proper disposal methods?

A substance is considered hazardous if it is corrosive, explosive, flammable, or if it contains toxic chemicals or any other potentially harmful materials. Unlike most hazardous wastes, which are byproducts of industrial and commercial operations, many household products contain only small amounts of toxic substances. Although they may be disposed of in small amounts, these hazardous substances can have significant cumulative effects on our environment.

Motor oil, pesticides, discarded paint cans, mothballs, flea collars, weed-killers, medicine, and household cleaners may seem like everyday items, but are examples of household hazardous products, which can become hazardous waste when improperly disposed.

Why Should I Be Concerned?

Household hazardous products that are improperly used, stored or disposed can enter groundwater and surface water supplies and be harmful to your health. In addition to polluting water resources, human health problems can also result from exposure due to improper use and storage of household hazardous products. Exposure can occur if you eat, drink, or smoke when a substance is on your hands, through breathing in dust or fumes, or through direct skin and eye contact. Health effects can range from irritated skin or watery eyes to burns, poisoning, and cancer.

Purchasing Tips

Carefully selecting the products you purchase will allow you to control the types of hazardous products you bring into your home.

- Read the label to assure that the product you are buying is suitable for your needs.
- Look for words like CAUTION, WARNING, FLAMMABLE, HARMFUL, DANGER, POISON. These can tell you if a product is hazardous.
- Buy only the amount of the product that you need.
- Compare products and brands to find the least hazardous chemical that will do the job you need.

Proper Use of Potentially Hazardous Household Products

- Read and follow the label directions carefully. Using more of the product is not better.
- Wear protective equipment as recommended by the manufacturer.
- Handle products carefully to avoid spills.
- Use products in well-ventilated areas. When working indoors, open windows and use a fan to circulate the air toward the outside. Take plenty of fresh-air breaks.
- Do not eat, drink, or smoke while using hazardous products. Traces of chemicals can be carried from hand to mouth.
- Do not mix products unless directions say that you can do so safely. Even different brands of the same product may contain incompatible ingredients.
- If you are pregnant, avoid exposure to toxic chemicals.
- Do not wear soft contact lenses when working with solvents and pesticides. They can absorb and hold the chemicals next to your eyes.
- Carefully and tightly seal products when you finish to prevent escaping fumes and spills.

Proper Storage of Potentially Hazardous Household Products

Follow label directions.

- Leave the product in its original container with the original label.
- Do not store near food and/or beverages.
- Make sure lids and caps are tightly sealed.
- Store hazardous products on high shelves or in locked cabinets out of the reach of children and animals.
- Store incompatible products separately. Keep flammable products away from corrosive products.
- Keep containers dry to prevent rusting.
- Keep flammable products away from heat, sparks, or other sources of ignition.
- Know where flammable materials are located in your home, and know how to extinguish them. Keep a fire extinguisher or materials to control fires where you can access them.

Proper Disposal of Potentially Hazardous Household Products

- Share leftover product(s) with someone who can use it.
- Take leftovers to a community hazardous waste collection point for proper disposal. Contact the Rhode Island Resource Recovery's Eco-Depot for their collection schedule, to make an

appointment, and find out which products they will take and what you may do with products they will not accept. See the For More Information section at the end of the factsheet.
- Follow the disposal instructions on the product label.
- Never burn hazardous products.

Proper use, storage and disposal of fuels and petroleum products

Motorized equipment that is not regularly and properly maintained can result in gasoline or oil leaks. As little as one gallon of gasoline can contaminate groundwater above health advisory levels. Gasoline may also contain additives like MTBE, which is highly soluble in water, and once in the groundwater, can move quickly and be very difficult to clean up.

- Store small amounts of fuel (a couple of gallons at a time) for motorized equipment in a dry, well-ventilated space away from the house and in an UL-approved container.
- Use all stored fuel for motorized equipment by the end of each season.
- Examine storage containers and equipment often for leaks and repair promptly.
- Do not fill machines with fuel or perform maintenance near drinking water wells, storm drains and surface waters and be mindful of spills.
- Recycle used motor oil at the oil igloo located at the town landfill or transfer station.
- Consider replacing underground fuel tanks (for home heating fuel) with properly contained above-ground tanks. Check all laws that apply, contact your local town hall building official.

Electronic Household Hazardous Waste

Roughly 1.5 million computers are thrown away annually. Unfortunately, computers pose a solid waste and recycling problem due to the toxins they, and other electronic equipment, contain. The cathode ray tubes found in computer monitors and televisions contribute roughly 40 percent of all lead in landfills. Due to advances in electronic technology, there is a new face to household hazardous waste. These include:

Cadmium - rechargeable batteries
Lead - cathode ray tubes in monitors and televisions
Mercury - some electronic equipment
Nickel - rechargeable batteries
Chromium - cathode ray tubes

Are There Alternatives?

If you would like to find alternatives to the products you normally use, follow the tips below. Additional suggestions are provided by EnviroSense, a Consumer's Guide to Safer Alternatives to Hazardous Household Products available on-line at http://es.epa.gov/techinfo/facts/safe-fs.html.

Looking for an alternative?

Adhesives - Use a water-based or latex adhesive.

Batteries - Choose rechargeable batteries (removable, so they can be recycled) and mercury-free batteries when possible.

Cleaners - Choose soap- or detergent-based cleaners when possible. Avoid non-water-soluble and corrosive cleaners when others offer an effective substitute.

Household pesticides - Look for ways to reduce your need for these products through appropriate cleaning and maintenance habits.

Floor and wood-finish strippers - Use a detergent or water-based stripper.

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Table 1. Household products that could be hazardous if improperly managed

Building Supplies - Sealants, some adhesives, wood preservatives.

Vehicle-related products - Antifreeze, oil, cleaning solvents, lead-acid batteries, gasoline.

Home maintenance products - Oil-based paints, mineral spiritis, products that can remove difficult greases ro adhesives, paint stripper.

Hobby and recreational supplies - Photo developer chemicals, marine paints, electronic equipment cleaners, swimming pool chemicals.

Pesticides - Herbicides, insecticides, rodent poison, yard foggers, chemical strips, fungicides.

For More Information:

University of Rhode Island Cooperative Extension Home*A*Syst Program
Offers assistance, information, and workshops on residential pollution prevention including private well water protection, septic system operation and maintenance, landscaping for water quality protection, and actions residents can take to reduce pollution.
401-874-5398 www.uri.edu/ce/wq

Refer to our website www.healthylandscapes.org for more information on sustainable landscaping and stormwater runoff control.

RI Department of Health, Office of Drinking Water Quality
Offers assistance and information on private well water testing and state certified water testing laboratories.
401- 222-6867 http://www.health.ri.gov/environment/dwq/Home.htm
For a listing of HEALTH's certified private laboratories in Rhode Island http://www.health.ri.gov/labs/instate.htm

Rhode Island Resource Recovery Corp.,
Rhode Island Eco-Depot
for information on household hazardous waste disposal, non-toxic alternatives and recycling.
(401) 942-1430 ext. 241
www.rirrc.org/site/ecodepot/eco_main.asp

The Massachusetts and Rhode Island Poison Center
Phone: 1 (800) 222-1222
www.maripoisoncenter.com

Adapted from: Managing Hazardous Household Products by Elaine Andrews, Environmental Resources Center, University of Wisconsin Cooperative Extension. Home*A*Syst: An Environmental Risk Assessment Guide for the Home. 1997.

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