Reducing the Use of Hazardous Household Products
SHORELAND BEST MANAGEMENT PRACTICES
NUMBER 14 IN THE SERIES

What Are Shoreland BMPs?

Best Management Practices (BMPs) are actions you can take to reduce your impact on the environment. BMPs have been described for agriculture, forest management, and construction. This fact sheet describes BMPs you can adopt on your shoreland property to help protect and preserve water quality. In many cases, the best management for shorelands may be retaining the natural characteristics of your property.

Minimizing the use of hazardous products and properly handling those that are used can preserve water quality.

Why Are Hazardous Household Products a Problem?

Many common household cleaners and home improvement products contain ingredients that are corrosive, toxic, or flammable. When used improperly or disposed of improperly, these products can become personal health and safety concerns and can also cause problems in the environment, contaminating ground water and soil and eventually reaching surface waters.

Smart Shopping

Think twice before buying household cleaning and maintenance products. General purpose products may work just as well as products developed for a specific surface or appliance. Some products may contain hazardous ingredients, such as degreasers, which contain petroleum distillates. Purchase nontoxic or less toxic products whenever possible (like water-based rather than solvent-based paints and cleaners). Alternatives to hazardous cleaning products are cheaper and some are equally effective. Do not use pesticides unless you have tried all other alternatives without success. The Western Lake Superior Sanitary District (WLSSD), the MN Pollution Control Agency (PCA), and the University of Minnesota Extension Service can provide information on alternatives to pesticides, cleaning products, and other hazardous products.

If you must use a hazardous product, read the label carefully before purchasing. Make sure the product will do what you want it to. Buy only the amount you need, and use it up. If you can't use it up, give it to someone who can.

Read the Label!

Reading product labels is the best way to get information about that product. Labels contain information about product ingredients, how to store and use safely, and hazards associated with the product. Labels on hazardous products contain SIGNAL WORDS, which tell how hazardous the product is to humans. This can give some indication of the potential problems to the environment.

<table>
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<th>Signal words: what they mean</th>
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<tr>
<td><strong>POISON</strong> = highly toxic</td>
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<td><strong>DANGER</strong> = extremely flammable, corrosive, or highly toxic</td>
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<td><strong>WARNING</strong> = moderate hazard</td>
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<td><strong>CAUTION</strong> = mild/moderate hazard</td>
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<td><strong>NO SIGNAL</strong> = the product is not hazardous</td>
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Remember, signal words are found on labels of new products. Older products in your home may not contain signal words.
Special Concerns About Mercury

Mercury in the environment is a serious public health issue in northern Minnesota. Many household products, including paints, batteries, thermometers, and fluorescent tubes, contain small amounts of mercury. When these products are not disposed of properly, mercury can be released into the environment. Mercury in lakes and rivers can accumulate in fish and be passed on to humans who eat them. Fish consumption advisories have been established by the MN Department of Health. Advisories have been set for certain lakes and fish species.

Product manufacturers are aware of the problems with mercury and many are modifying their products to reduce or remove it. Alkaline batteries sold in Minnesota after January 1, 1996, have no added mercury and can safely be discarded in the trash.

Here are some things you can do to reduce mercury waste:

- Look for alternatives; many mercury-free products are available and can replace mercury-containing products.
- Purchase alkaline batteries with no added mercury.
- Use rechargeable nickel-cadmium batteries to reduce overall battery waste by 90%; nickel-cadmium batteries should be saved for a collection and recycling program.
- Button batteries, used in watches, cameras, and calculators, are recyclable. Return these to a retail outlet that collects them, or to a household hazardous waste collection program.
- Fluorescent tubes – contact your county solid waste office for disposal or handling advice.
- Take paints, thermostats, mercury switches, thermometers, blood pressure cuffs, and other items containing mercury to a household hazardous waste collection program for recycling; do not throw these in the trash.
- Look before you buy items to see if they contain mercury: many products you might not suspect contain mercury (e.g., some red-light tennis shoes).

Regulations That Apply

The Minnesota Legislature prohibits the placement of the following items in municipal solid waste:

- lead-acid batteries (vehicle batteries)
- waste motor oil and oil filters
- rechargeable batteries
- thermostats, thermometers, or electric switches containing mercury

Don't dump antifreeze down your drain. Contact your county solid waste office for information on proper disposal of antifreeze.
How Mercury Enters the Food Chain

Here's what can happen when mercury is improperly disposed of and mercury compounds enter a river or lake food chain:

1. Mercury enters the river or lake.

2. Mercury attaches to particles of organic material or sediment and falls to the river or lake bottom.

3. Bacteria and other microorganisms consume the mercury and convert it to a fat-soluble form.

4. Bacteria that contain mercury are eaten by small animals on the riverbed and the mercury enters their fatty tissues.

5. Small fish eat the small animals.

6. Larger fish eat the smaller fish and the mercury builds up in their tissues. The older the fish, the more mercury it contains.

7. If a contaminated fish is eaten by a human, the mercury in the fish is absorbed into human fatty tissues. Although mercury will be eliminated from our bodies over time, frequent meals of contaminated fish will cause accumulation of mercury in human tissue to potentially unsafe levels. No method of cleaning or cooking fish will reduce the amount of mercury in its flesh.
For More Information...

call
county offices:
- University of Minnesota Extension Service
- Solid waste office

regional offices of MN State agencies:
- MN Pollution Control Agency (PCA)
- Western Lake Superior Sanitary District
  Garbage Hotline - (218) 722-0761

read

Easy Recipes for Alternatives to Hazardous Household Products.
Brochure available from Western Lake Superior Sanitary District.

Household Hazardous Waste Fact Sheets. Available from MN Pollution Control Agency and Western Lake Superior Sanitary District.

Household Hazardous Disposal Guide. Available from MN Pollution Control Agency and Western Lake Superior Sanitary District.


Household Battery Basics. A guide to battery disposal. Western Lake Superior Sanitary District.

PART OF A SERIES...

This fact sheet is one of a series designed to assist shoreland property owners in protecting and preserving water quality. The series includes:
1. Understanding Shoreland BMPs
2. Maintaining Your Shoreland Septic System
3. Installing a Shoreland Septic System
4. Ensuring a Safe Water Supply
5. Limiting Impact of Recreation on Water Quality
6. Developing Shoreland Landscapes and Construction Activities
7. Stabilizing Your Shoreline to Prevent Erosion
8. Minimizing Runoff from Shoreland Property
9. Caring for Shoreland Lawns and Gardens
10. Managing Your Shoreland Woodlot
11. Valuing Your Shoreland Trees
12. Preserving Wetlands
13. Managing Crops and Animals Near Shorelands
14. Reducing the Use of Hazardous Household Products
15. Preventing the Introduction of Exotic Species
16. Accessing Information to Protect Water Quality
17. Shoreland Stewardship Scorecard
18. Conserving Water

This series of fact sheets is a cooperative effort of the following agencies:
University of Minnesota Extension Service of the Arrowhead counties
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Minnesota Board of Water and Soil Resources
Minnesota Department of Health
Minnesota Department of Natural Resources, Division of Fish and Wildlife, Division of Waters, Division of Forestry
Minnesota Pollution Control Agency
Minnesota Sea Grant Extension Program
Mississippi Headwaters Board
St. Louis County Health Department, Environmental Services Division
Soil and Water Conservation Districts of the Arrowhead counties
Natural Resources Conservation Service
Environmental Protection Agency
Western Lake Superior Sanitary District

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