



MI-6946-S  
1998

UNIVERSITY OF MINNESOTA  
**Extension**  
SERVICE

# 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.

### Signal words: what they mean

most  
dangerous



safest

POISON	= highly toxic
DANGER	= extremely flammable, corrosive, or highly toxic
WARNING	= moderate hazard
CAUTION	= mild/moderate hazard
NO SIGNAL WORD	= the product is not hazardous

*Remember, signal words are found on labels of new products. Older products in your home may not contain signal words.*

The label will also include more specific information about the kind of hazard associated with the product, whether it is flammable, corrosive, reactive, or toxic.

Look for signal words on labels and buy products with no signal words, or with the lowest hazardous level signal word (caution or warning). Some products will indicate whether they are safe for septic systems.

## Safe Storage and Disposal

Follow label instructions for use and storage of all household products. Do not store paints and pesticides in unheated buildings where they will freeze and become waste.

Dispose of banned or unusable products properly. Do not pour leftovers down the drain, on the ground, or into a storm sewer. Empty containers, including paint cans (lids should be left off) and aerosol cans, should be placed in the trash. Pesticide containers must be triple-rinsed before disposal. The rinse water should be used for the same purpose the pesticide was used for. The clean, empty containers can then be placed in the trash. In some areas, pesticide containers can be collected to be recycled into new pesticide containers. Hazardous product containers should not be recycled through community recycling programs.

Call your county solid waste office for information about household hazardous waste collections in your area.

## 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 officer 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).

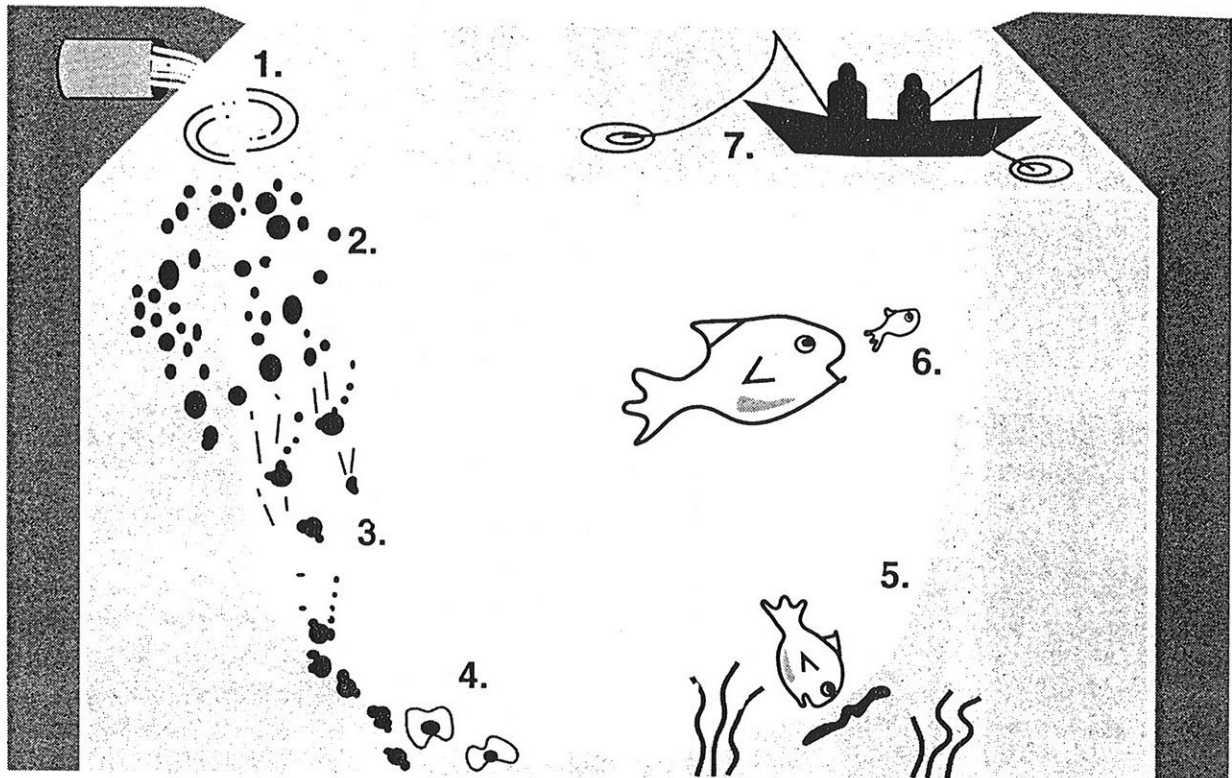
## Regulations That Apply

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 Cleaning Products – What About Substitutes.** Available from county offices of the University of Minnesota Extension Service.

**Mercury: Get Mad Now, Not Later.** A guide to mercury in common household products, proper disposal, and available alternatives. 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  
College of Natural Resources, University of Minnesota  
Water Plan Coordinators of the Arrowhead counties  
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

## USE OF PUBLICATION...

Copyright © 1998 Regents of the University of Minnesota. All rights reserved.

These publications may be photocopied for local distribution. The addition of commercial names, products, or identifiers is not permitted. Please do not add or delete any text material without contacting:

University of Minnesota Extension Service, Distribution Center  
20 Coffey Hall • 1420 Eckles Ave  
St Paul, MN 55108-6069 • 612-625-8173

You may add information about contact persons or regulations specific to your county, region, or lake association.

Find more University of Minnesota Extension Service educational information on the World Wide Web at <http://www.extension.umn.edu/>

♻️ Printed on recycled paper with a minimum 10% postconsumer waste. Produced by the Educational Development System, University of Minnesota Extension Service.

In accordance with the Americans with Disabilities Act, this material is available in alternative formats upon request.

Please contact your Minnesota county extension office or, outside of Minnesota, contact the Distribution Center at (612) 625-8173.