

a healthy environment starts at home

a guide to proper disposal of household hazardous products



A HEALTHY ENVIRONMENT STARTS AT HOME

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www.mwra.com

CONTENTS

What are household hazardous products?	2	around the HOUSE	15
How can these products affect Lake Erie?	3	alternative house-cleaning products	16
What can YOU do?	4	thermostats	17
in the KITCHEN	6	CFLs/fluorescent bulbs	17
fats/oils/grease	6	electronics	18
cleansers/detergents	7	glues	19
oven cleaners	8	lighter fluid	19
		shoe polish	19
in the BATH	9	laundry detergent	19
pharmaceuticals	10	in the GARAGE	20
thermometers	11	motor oil	21
sharp/needles	13	car batteries/tires	22
alternative bathroom-cleaning products	14	paint thinners/solvents	23
before you flush . . .	14	gasoline/kerosene	23
		antifreeze/brake fluid	24
		roof tar/driveway sealant	24
		paint	25
		in the YARD	26
		pesticides/herbicides/etc.	26
		pool	28
		car washing	28
		composting	29
		recycling	30
		household hazardous waste collections	31
		learn more	32





What are household hazardous products?

In the Greater Cleveland Area, we live and work in a watershed that flows to Lake Erie. In our daily lives, we use many products that contain chemicals that may be hazardous to the environment. Examples include: cleaners, polishes, anti-freeze, used motor oil, pesticides, batteries, paints, paint thinners, furniture strippers, and other products. The hazards increase when these products are improperly used or discarded.

Household hazardous products can be toxic, corrosive, reactive, flammable, or explosive. Labels on these products may contain the words “caution,” “warning,” or “danger.” If not used properly, some of these products can cause skin irritation, headaches, respiratory ailments, or other symptoms.

How can these products affect Lake Erie?

Many hazardous household products can enter our watershed through improper disposal or even normal use. When these products are rinsed down a drain inside your house, they travel through the sewers to one of the Northeast Ohio Regional Sewer District's three wastewater treatment plants.

Although the wastewater treatment plants provide a high level of treatment to the wastewater that they receive, the treatment process is not designed to remove all of the substances in these products, which may pass through the treatment plant and reach the Cuyahoga River and Lake Erie.

In addition, many storm sewers flow directly to a local river or the lake. If these products are rinsed down outside drains or street sewers, they may likewise flow into local waterways such as Big Creek, Chagrin River, Doan Brook, Dugway Brook, Euclid Creek, Mill Creek, Nine Mile Creek, Rocky River, and Lake Erie, and can harm aquatic life.



What can YOU do?

READ THE REST OF THIS BOOKLET

You'll learn how to properly dispose of many household products that may be hazardous, some alternative cleaning methods, and where you can get more information. Keep this booklet for handy reference, pass it on to a friend, or recycle it.

ADJUST YOUR HABITS

For example, rather than applying pesticides to your entire yard to kill a few weeds, apply the pesticide just to the affected area or, better yet, pull the weeds by hand. Clean up spills of hazardous substances immediately instead of letting them dry, which makes them more difficult to remove. If you are going to use a product that might be hazardous, purchase only the quantity you need and follow the package directions carefully.



PRACTICE PROPER DISPOSAL

Take advantage of the household hazardous waste collections offered throughout Northeast Ohio. Residents can use these events to dispose of unwanted oil-based paints, pesticides, and other hazardous substances.

Many local cities also provide hazardous waste collection events for their residents. Refer to the websites listed on page 31 or check with your local service department.

IN THIS BOOKLET . . .

You will see some items marked with an icon indicating:



DO NOT POUR

Certain substances should not be poured down sink or shower drains or street drains. Proper disposal guidelines are provided.



HOUSEHOLD HAZARDOUS WASTE

Indicates an item that can be taken to one of the household hazardous waste roundups organized throughout Northeast Ohio.



SAFE ALTERNATIVES

Tips on methods for cleaning that do not involve substances that may be harmful to the environment.



in the **KITCHEN**

FATS/OILS/GREASE



In the kitchen, many things going down the drain would be better disposed of in other ways. Fats, oils, and grease, (commonly referred to in the wastewater industry as “FOG”) can enter drains from washing kitchenware or from food preparation. FOG can accumulate in pipes and lead to clogs in your home’s plumbing or in the local sewers.

Do not pour grease or cooking oil down the drain or put fat trimmings into the garbage disposal. Collect FOG into a non-recyclable container and put it into the regular household trash. Be sure to scrape food scraps from dishes when placing them in the dishwasher.

By limiting the amount of FOG going down the drain, you can prevent clogs that lead to sewer back-ups and reduce the need for sewer line cleaning.

CLEANSERS/DETERGENTS

Many cleansers that are used in the kitchen contain ammonia, bleach, or lye, any of which can cause skin or eye irritation if not used properly.


! *Alternative: Vinegar can be used to clean many surfaces. Mix together 1/4 cup vinegar and 1 gallon warm water. Apply with sponge or spray bottle.*

Many dishwashing detergents contain phosphates, which are a source of nutrient pollution in Lake Erie. If possible, use low- and zero-phosphate detergents.



OVEN CLEANERS

To reduce the use of oven cleaners that may contain harmful substances, put aluminum foil or a commercially available liner in the bottom of the oven and under each of the stove burners to catch spills.

 *Alternative oven cleaners:*

Mix ¼ cup baking soda, 2 tbsp. salt, and hot water (as needed) to make a paste. Be sure to keep the paste off wires and heating elements. Let it sit for 5 minutes, then wipe off OR

Mix 2 tbsp. liquid soap (castile, peppermint), 2 tsp. borax, and 1 qt. warm water. Spray on oven surfaces and wait 20 minutes, then clean. For tough stains, scrub with very fine steel wool and baking soda.





in the **BATH**

Often the cleansers used in the bathroom have many of the same ingredients as those used in the kitchen, including bleach, ammonia, and lye. Most cleaners used in the bathroom go down the drain during use and reach the District's wastewater treatment plants.

Other bathroom items, such as pharmaceuticals, hypodermic needles, and mercury thermometers, should not be flushed or rinsed down the drain.



PHARMACEUTICALS

A common method of disposing of unwanted medication has been to flush it down the toilet or rinse it down the drain. But wastewater treatment plants are not designed to remove these medicines, so they may pass through the treatment process unchanged. When the treated water is released into the Cuyahoga River and Lake Erie, it can still contain traces of these medicines.

Currently, the best way to dispose of unwanted medicine is either to check for a local collection event or to securely package the medicine and put it in the trash, out of reach of children and animals.

Steps should be taken to make it difficult for any person or animal to unintentionally ingest the medicine. Keep it in its

original packaging. (These containers are often childproof and the labels may contain necessary information.) Use a marker to black out personal information.

Make pills unusable by crushing and dissolving them with a small amount of water. Absorb liquid medication with flour, table salt, or sawdust.

Secure any packaging with strong tape. Seal the package or dissolved liquid medication inside a non-recyclable, non-transparent container. Place this in with your household trash.



THERMOMETERS



Many older fever thermometers contain mercury, a naturally occurring, dense, silvery metal that is a liquid at room temperature. If it is released from the thermometer, the liquid can evaporate, creating a colorless, odorless vapor that is dangerous if inhaled.

When mercury reaches the lakes and waterways, it can undergo a natural chemical process that converts it into the more harmful methylmercury which bioaccumulates in the foodchain. When methylmercury reaches fish eaten by humans and wildlife, it can be at levels high enough to be harmful. Fetuses are especially vulnerable to mercury in fish eaten by their mothers.

Eating fish is healthful and safe when advisories issued by the FDA and Ohio Department of Health are followed:

web.epa.state.oh.us/dsw/fishadvisory



Alternative: use a digital thermometer (see below)

In case of a mercury spill, call the Ohio EPA's spill hotline at 1.800.282.9378.

FREE THERMOMETER EXCHANGE

Bring your mercury fever thermometer (sealed in a zip-lock bag or plastic container) to the NEORSD Environmental & Maintenance Services Center, located at 4747 East 49th Street in Cuyahoga Heights, weekdays between 9 a.m. and 4 p.m. In exchange, you can receive a free digital thermometer. (While supplies last. One per household, please.) If you have other mercury containing items to discard, please call 216.641.6000 or email mercuryprogram@neorsd.org.



SHARPS/NEEDLES

Sharps include lancets, hypodermic needles, syringes, scalpel blades, and broken glass articles.

Do not dispose of needles or syringes down a drain or toilet. Place them in a rigid, leak-proof, puncture-resistant container with a tight-fitting lid (a commercially-available sharps container or a detergent bottle, two-liter bottle, plastic juice container, or a coffee can with secure lid). Glass containers are not recommended. Clearly mark the container “SHARPS.”

LEARN MORE

www.epa.ohio.gov/portals/34/document/guidance/gd_462.pdf

ALTERNATIVE BATHROOM-CLEANING PRODUCTS

TOILET BOWL CLEANER



Pour 1/4 cup baking soda into bowl and drizzle with vinegar. Let sit for 1/2 hour. Scrub and flush. Add borax for stains.

SINK/TUB/TILE



Use a mixture of 1/2 cup baking soda and 2-3 tbsp. liquid soap.

MILDEW REMOVER



Dissolve together 1/2 cup vinegar and 1/2 cup borax in warm water. Apply with sponge or spray bottle.

CLOGGED DRAINS

Using a hair trap can be helpful in preventing clogged drains.



Use a plunger or plumber's "snake" to loosen blockage. Then pour 1/2 cup of borax followed by 2 cups of boiling water OR

Pour 1/4 cup baking soda down the drain, followed by 1/2 cup of vinegar. Cover drain and let sit for 15 minutes. Follow with 2 quarts of boiling water.

BEFORE YOU FLUSH . . .

. . . please ask yourself, "Where does it go?" Do not flush diapers, baby wipes, feminine hygiene products, cigarette butts, bandages, or condoms down the toilet. They make it more difficult to treat the wastewater once it gets to the treatment plant.



around the **HOUSE**

Many products that we use around the house, such as furniture polish, paint stripper, and carpet and upholstery cleaners can contain hazardous chemicals that often are rinsed down the drain when cleaning up. These chemicals can then travel throughout our watershed and to Lake Erie. Instead of pouring or flushing these products, use them up entirely or take them to a local household hazardous waste collection (see page 31).

ALTERNATIVE HOUSE-CLEANING PRODUCTS

BLEACH



Diluting bleach is less toxic, but using a mixture of baking soda and water is safer. Use borax or baking soda to whiten. (Borax is a good grease cutter, too.)

FURNITURE POLISH



Rub toothpaste on wood furniture to remove water marks OR

Polish wood with 2 teaspoons of lemon oil and 1 pint mineral oil in a spray bottle. Spray, rub in, and wipe clean OR

Mix two parts olive oil to one part lemon juice. Rub mixture in and let stand for several hours. Polish with a soft, dry cloth OR

Melt 1 tablespoon of canauba wax into 2 pints mineral oil. Use sparingly and rub hard.

UPHOLSTERY CLEANER



Sprinkle corn meal, baking soda, or cornstarch on dry rugs and vacuum. Use club soda or soap-based rug shampoo.

CARPET CLEANER



Mix 1/4 cup vegetable oil-based liquid soap and 3 tbsp. (or more) water. Whip ingredients in bowl with egg beater. Rub foam into problem areas of the rug. Rinse well with water.

MORE ALTERNATIVE CLEANERS AND RECIPES

www.ecocycle.org/hazwaste/recipes.cfm

THERMOSTATS



The mercury in thermostats is toxic and harmful once it is released into the environment. Thermostats are accepted at at the District's EMSC (see page 12) and at local household hazardous waste collections.

In case of a mercury spill, call the Ohio EPA's spill hotline at 1.800.282.9378.

COMPACT FLUORESCENT LIGHTS



These contain mercury as well. If CFLs are not recycled, they enter landfills and most likely break, leaking mercury into streams and the lake.

Home Depot has launched a free in-store CFL recycling program at all its locations:

www.cuyahogawd.org/residents/bulbs.htm

FLUORESCENT BULBS



Fluorescent bulbs contain mercury and should not be placed in the regular trash. They are accepted at local household hazardous waste collections, and also can be brought to recycling centers such as Cleveland's Fluorescent Recycling Inc. (9214 Reno Drive, 216.341.1500) for a small fee.





ELECTRONICS

CUYAHOGA COUNTY RESIDENTS

The Cuyahoga County Solid Waste District recycles computers during the months of April and August in many local cities:

www.cuyahogaswd.org/residents/comprec.asp

Several local companies, such as Cleveland's RET3 Job Corp, recycle and refurbish computers, ink jets, cell phones, televisions, and other electronic equipment:

216.361.9991 | www.ret3.org

Solon's Regency Technologies provides a full line of computer recycling and computer remarketing services:

440.248.3991 | www.itscrap.com

SUMMIT COUNTY RESIDENTS

From April through September, Summit County residents can recycle their computer equipment at the Household Hazardous Waste Recycling Center in Stow, Ohio:

www.saswma.org/computer.htm

GLUES



Unused glue products should not be thrown in the trash, as they can enter landfills and eventually leak into bodies of water. Glues are accepted at local household hazardous waste collections (see page 31).

LIGHTER FLUID



Do not pour lighter fluid down the drain. To clean up a lighter fluid spill, cover it with kitty litter, sweep it up, and throw it away in the trash.



Use a charcoal chimney starter, electric coal starter, and grills that use propane or natural gas.

SHOE POLISH



Some shoe polishes contain toxic chemicals and should be handled as a hazardous substance.



Remove dirt and dust with a damp washcloth, then dry and buff with a white towel. Mix lemon juice with a 1/2 cup olive oil. Wipe small amounts on shoes. Allow to dry naturally.

LAUNDRY DETERGENT

Many detergents contain phosphates, which are a source of nutrient pollution in Lake Erie. When possible, use low- or zero-phosphate detergents.



in the GARAGE

Although there are few alternatives to automotive fluids, there are still many things that can be done to lessen the impact our cars have on the environment.

The most important thing is to keep vehicles properly maintained. Read and follow your owner's manual. A well-maintained vehicle emits less exhaust into the air and is less likely to leak hazardous fluids into our environment.

In the course of maintaining automobiles, motorcycles, boats, lawnmowers, and other machines, it is important to dispose of all fluids properly because most are hazardous to human and animal health and to the environment.

MOTOR OIL



Do not pour used motor oil down the drain or a storm drain. It is hazardous to human and animal health and to the environment.

If you change the oil in your car yourself, it is important to recycle the old oil. Used motor oil can be recycled for free at many service stations and through city recycling programs.

FIND MOTOR OIL RECYCLING CENTERS

www.earth911.com



CAR BATTERIES

Automotive batteries contain over 20 pounds of lead and a gallon of sulfuric acid each, and so it is important that they be recycled. (The materials in batteries can be reused in new batteries.) Many auto-part stores accept lead-acid batteries.

FIND CAR BATTERY RECYCLING CENTERS

www.earth911.com

TIRES

CUYAHOGA COUNTY RESIDENTS

The Cuyahoga County Solid Waste District holds an annual Scrap Tire Round-Up in September:

www.cuyahogaswd.org/localgov/scraptire.asp

SUMMIT COUNTY RESIDENTS

From April through September, Summit County residents can recycle their scrap tires at the Household Hazardous Waste Recycling Center in Stow, Ohio. There is a fee of \$1 per tire.

www.saswma.org/tire.htm

You also can recycle tires through the retailer who sells you your new tires. Some accept tires from people who are not purchasing new tires, for a small fee.





PAINT THINNERS/SOLVENTS



Paint thinners, solvents, and primers are hazardous to human health and the environment, and our waterways should not be exposed to them. Bring them to a local household hazardous waste collection (see page 31).

GASOLINE/KEROSENE



Unused or unwanted gasoline or kerosene should not be poured into a storm sewer or down the drain. It is harmful to humans and the environment.

Be sure to store these fuels in proper containers and watch for leaks or spills. They should be taken to a local household hazardous waste collection (see page 31).



ANTIFREEZE/BRAKE FLUID



Do not pour unused or unwanted antifreeze or brake fluid into a storm sewer or down the drain. It is a serious health hazard to humans and animals if ingested.

ROOF TAR/DRIVEWAY SEALANT



The chemicals in roof tar and its fumes are hazardous to humans, and can run off and pollute surface water. You can dispose of these substances at a local household hazardous waste collection (see page 31).

PAINT

OIL-BASED



Unused or unwanted oil-based paint can be donated or given to a neighbor to use. It is a hazardous material that should not be dumped or thrown in the trash. Oil-based paint can be taken to a local household hazardous waste collection (see page 31).

LATEX



Latex paint is not collected at household hazardous waste collections because it is not hazardous. However, it should still not be poured down drains. It can be thrown out along with other household trash, as long as it has solidified first.

For small amounts of latex paint, let the liquid evaporate outdoors in a covered area away from children and pets. Discard the can of dried paint in trash with the lid removed. For larger amounts, mix in a drying agent such as kitty litter or sawdust to absorb the liquid, and discard the hardened paint with your household trash.





in the **YARD**

PESTICIDES/HERBICIDES/INSECTICIDES/ RODENT CONTROL CHEMICALS



The purpose of pesticides such as insecticides, weed killers, and mouse poison is to kill these organisms. But many of these products are also toxic to people, animals, birds, and beneficial insects, not just the pests that you want to control.

Remember that products falling into this category include flea killers, mosquito repellent, and algae and mildew killers.

If you use pesticides in your yard or around your house, do not over-apply, and take any unwanted chemicals to a local hazardous waste collection (see page 31).

Generate compost (see page 29) and mulch to reduce solid waste and the need for fertilizers. Using native plants can stabilize soil and decrease the chance of invasive species.

Integrated Pest Management (IPM) uses information on the life cycles of pests, their interaction with the environment, and available pest control methods to manage pest damage with the least possible hazard to people, property, and the environment.

LEARN MORE ABOUT INTEGRATED PEST MANAGEMENT

www.epa.gov/opp00001/factsheets/ipm.htm





POOL

Pools can be cleaned by ionization, thereby limiting the amount of chlorine and bromine used. Use limited amounts of these substances and take any unwanted pool chemicals to a local hazardous waste collection (see page 31).

CAR WASHING

Try to use car wash establishments rather than doing it yourself because runoff from home car washing can reach storm drains, which discharge into local waterways without being treated. (Water from commercial car washes goes to a treatment plant.)

If you wash your car at home, consider washing it on your lawn or over dirt so that the wastewater can be absorbed by the soil instead of flowing directly into storm drains.

COMPOSTING

Yard trimmings and food residuals together constitute 24 percent of the U.S. municipal solid waste stream. Composting creates a useful product from organic waste that would otherwise have been litter in the environment or taken to a landfill.

Check with your local community for rules regarding the placement and management of compost piles.



The U.S. EPA recommends composting the following:

hair, fur | cardboard rolls | hay, straw | clean paper houseplants
| coffee grounds and filters | leaves | cotton rags | nut shells |
dryer and vacuum cleaner lint | sawdust | eggshells | shredded
newspaper | fireplace ashes | tea bags | fruits, vegetables | wood
chips | grass clippings | wool rags | yard trimmings

You should NOT compost:

Black walnut tree leaves or twigs | Coal or charcoal ash | Dairy
products | Diseased or insect-ridden plants | Fats, grease, lard, or
oils | Meat or fish bones and scraps | Pet wastes (dog or cat feces,
soiled litter) | Yard trimmings treated with chemical pesticides

MORE COMPOSTING INFO

www.epa.gov/waste/conserve/rrr/composting/basic.htm



RECYCLING DROP-OFF CENTERS

CUYAHOGA COUNTY RESIDENTS

www.cuyahogaswd.org

LAKE COUNTY RESIDENTS

www.lakecountyohio.gov (click on "Solid Waste District")

LORAIN COUNTY RESIDENTS

www.loraincounty.us/solidwaste.aspx

SUMMIT COUNTY RESIDENTS

www.saswma.org/dropoff.htm

PHONE BOOK RECYCLING

CUYAHOGA COUNTY RESIDENTS

www.cuyahogaswd.org/residents/phonerec.htm

LAKE COUNTY RESIDENTS

www.lakecountyohio.gov (click on "Solid Waste District")

SUMMIT COUNTY RESIDENTS

www.saswma.org/telephonebook.htm

HOUSEHOLD HAZARDOUS WASTE COLLECTIONS



Materials accepted at residential dropoffs may include:

Adhesives | Lacquer | Aerosol cans | Mercury thermostats |
Antifreeze | Nail polish | Brake fluid | Oil-based paint | Car
batteries | Paint disposal | Compact fluorescent lightbulbs
(CFLs) | Paint strippers | Degreasers | Paint thinners | Fertilizers
| Pesticides | Fluorescent light bulbs | Photography chemicals
| Fungicides | Pool chemicals | Gasoline and unwanted fuels |
Solvents | Herbicides | Transmission fluid | Household cleaners |
Used motor oil | Insecticides | Varnish | Items containing mercury

Visit the websites below for specific information on the items that can be accepted at your local collection event.

CUYAHOGA COUNTY RESIDENTS

Twice a year, Cuyahoga County holds a free collection event for its residents, providing an environmentally-safe disposal of hazardous, poisonous, or toxic household products:

www.cuyahogawsd.org/residents/hhwaste.asp

SUMMIT COUNTY RESIDENTS

From April through September, Summit County residents can take their environmentally hazardous materials to the Household Hazardous Waste Recycling Center in Stow, Ohio:

www.saswma.org/hhwrc.htm

LAKE COUNTY RESIDENTS

www.lakecountyohio.gov (click on "Solid Waste District")

LORAIN COUNTY RESIDENTS

www.loraincounty.us/solidwaste.aspx

LEARN MORE

ALTERNATIVE CLEANERS AND RECIPES

www.ecocycle.org/hazwaste/recipes.cfm

CITY OF CLEVELAND

www.city.cleveland.oh.us

CUYAHOGA COUNTY SOLID WASTE DISTRICT

www.cuyahogaswd.org

HOW-TO TIPS

www.ehow.com

LAKE COUNTY

www.lakecountyohio.gov

LORAIN COUNTY

www.loraincounty.us

NORTHEAST OHIO REGIONAL SEWER DISTRICT

www.neorsd.org

OHIO EPA

www.epa.state.oh.us

RECYCLING CENTERS

www.earth911.com

SUMMIT/AKRON SOLID WASTE MANAGEMENT AUTHORITY

www.saswma.org





Northeast Ohio Regional
Sewer District

Protecting Your Health and Environment