

Q&A

NESC

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Editor's Note:

This column is based on calls received over the National Environmental Services Center (NESC) technical assistance hotline. If you have further questions concerning household cleaning products, call (800) 624-8301 or (304) 293-4191 and ask to speak with a technical assistant.



Household Hazards

What's a safe alternative for household cleaning solutions?

Americans produce 1.6 million tons of household hazardous waste every year (Earth's 911, 2000)? What is household hazardous waste? Well, the U.S. Environmental Protection Agency defines these household products as flammable, combustible, toxic, explosive/reactive, or corrosive. Some of these products you are probably already aware of. For example, it is well known that brake fluid, antifreeze, pool chemicals, and varnishes can be very dangerous if not stored, used, or disposed of properly. But did you know that nail polishes/removers, moth balls, charcoal lighter fluid, and fluorescent lights can also cause significant damage to humans, vegetation, wildlife, and other environmental resources? Problems usually arise when these chemicals leak and/or spill from their containers. If the spill interacts with other chemicals, toxic gases can form or even explode. Another significant problem can occur when these spills take place outside, in driveways or lawns. A simple rain can sweep these chemicals into larger water bodies or groundwater—polluting healthy areas and damaging the ecosystems that depend on them.

Take a look at the **table below** to see how many potentially dangerous products are stored in your home (MPCA, 2002).



It is estimated that the average American home stores up to 100 pounds of household hazardous waste. (Earth's 911) A great way to prevent accidents and make your home safe is to limit the amount of household hazardous waste stored in and around your home. By limiting the storage of these products, you reduce the risk of accidents in your home and the environment around it. The Health Department of Tacoma-Pierce County, Washington, has provided an extensive **table (on the facing page)** containing alternative cleaning solutions for everyday home maintenance. Some of the solutions may surprise you, as the ingredients can be gathered around the home or purchased for a low cost.

Cleaning Hints

- Wear gloves to protect your hands.
- Use the simplest, mildest cleaner that can do the job.
- Never mix bleach with an ammonia containing product. A poisonous gas will be produced.

Note: NESC does not guarantee the effectiveness of any and all alternative cleaning solutions. Use these and all other solutions with CAUTION. Keep these solutions and all other cleaning supplies out of reach of children.

Automotive Improvement

Auto batteries
Brake fluid
Carburetor cleaner
Degreasers
Fuels
Oil filters
Used antifreeze
Used motor oil

Household Items

Aerosol products
Button batteries
Batteries
Drain cleaners
Fluorescent lights
Mothballs
Nail polish/remover
Oven cleaner
Polish w/solvents
Spot removers
Thermometers (Hg)

Lawn and Garden

Bug spray
Charcoal lighter fluid
Fertilizer (w/weed killer)
Insect killer
Pool chemicals
Rodent bait
Weed killer

Home

Concrete cleaner
Driveway sealer
Furniture stripper
Glue (w/solvents)
Latex paint
Oil-based paint
Paint remover
Paint thinner
Roofing tar
Stain/varnish
Wood preservatives

Purpose

Less Toxic Alternative

Aluminum spot remover	2 tablespoons cream of tartar + 1 quart hot water
Bleach	Borax
Car battery corrosion	Baking soda + water
Cleaners; general household	Baking soda
Coffee cup stain remover	Moist salt
Copper cleaner	Lemon juice + salt
Dish detergent; grease cutter	1/2 cup baking soda + usual amount of liquid detergent
Drain cleaner	Plunger followed by 1/2 cup baking soda + 1/2 cup vinegar + 2 quarts boiling water
Fertilizer	Compost and vermicompost
Furniture polish	1 tablespoon lemon oil in 1 pint mineral oil
Garbage disposal deodorizers	Used Lemons
Grease removal	Borax on damp cloth
Hand cleaner: paint/grease	Baby oil
Ink spot remover	Cold water + 1 tablespoon cream of tartar + 1 tablespoon lemon juice
Laundry detergent	Basic soap
Linoleum floor cleaner	1 cup white vinegar + 2 gallons water
Mildew remover	Equal parts of vinegar and salt
Oil stain remover	White chalk rubbed into stain before laundering
Oven cleaner	2 tablespoons liquid soap + 2 teaspoons borax + warm water
Paint; oil based/stain/spray	Water-based, non-aerosol paints
Paint brush softener	Hot vinegar
Perspiration spot remover	Baking soda
Pet odor remover	Cider vinegar
Rug/carpet cleaner	Club soda
Rust removal (clothing)	Lemon juice + salt + sunlight
Scorch mark removal	Grated onion
Scouring powder	Baking soda
Shaving cream	Brush and shaving soap
Silver polish	1 quart warm water + 1 tablespoon baking soda + piece of aluminum foil + 1 tablespoon salt in glass dish; soak silver, rinse and dry
Spot remover	Club soda, lemon juice, or salt
Stainless steel polish	Mineral oil
Toilet bowl cleaner	Paste of borax + lemon juice
Tub and tile cleaner	1/4 cup baking soda + 1/2 cup vinegar + warm water
Water softener	1/4 cup vinegar
Wine stain removal	Salt
Window cleaner	2 tablespoons vinegar in 1 quart warm water
Wood polish	3 parts olive + 1 part white vinegar; almond or olive oil (interior unvarnished wood only)

Source: *National Management Measures Guidance to Control Nonpoint Source Pollution from Urban Areas Tacoma-Pierce County, Washington, Health Department*

References

Earth's 911. 2000. *Household Hazardous Waste*. www.earth911.com/states/recycling/hhw/default.asp. Accessed June 21, 2005.
Minnesota Pollution Control Agency (MPCA). 2002. *Household Hazardous Waste*. www.pca.state.mn.us/waste/hhw.html#guide. Accessed June 22, 2005.

Tacoma-Pierce County, Washington, Health Department. *Household Hazardous Wastes: Less Toxic Alternatives for Cleaning*. www.tpchd.org/sourceprotection/alter.html. Accessed June 21, 2005.

Capacity, Management, Operations & Maintenance (CMOM) Guide Available

The Compliance Assistance and Sector Programs Division, Office of Compliance, U.S. Environmental Protection Agency (EPA), has prepared a Capacity, Management, Operations & Maintenance (CMOM) Guide to encourage the EPA regions and states, as well as others, to use a CMOM approach for implementing the performance-based strategy for the sanitary sewer overflow (SSO) national priority.

This guidance is a compliance-monitoring tool for use by federal and state inspectors and a compliance-assistance tool for use by the regulating community: owners or operators of sewer systems collecting domestic sewage. The guidance is also for use by consultants or third-party evaluators or compliance-assistance providers.

The guidance identifies, for the regulated community, some of the criteria used by EPA inspectors to evaluate a collection system's management, operation, and maintenance program activities. Owners/operators can review their own systems against the checklist (Chapter 3) to reduce the occurrence of sewer overflows and improve or maintain compliance. Additionally, having key board members/policymakers read this guidance also will allow them to better understand the benefits of investing in a good CMOM program.

The CMOM guidance is available at www.epa.gov/npdes/sso (click on the "fact sheets" line under "Other Information") and www.epa.gov/clearinghouse. A limited number of paper copies is available through the National Service Center for Environmental Publications (NSCEP) at (800) 490-9198 and the Office of Water Resource Center (202) 566-1729. For further information, contact Sharie Centilla at (202) 564-0697.

