

**Appendix O**  
**Hazardous Waste Management**

**Household Hazardous Waste Collection Days in the Cayuga Lake Watershed - 1995 through 1999**

Name	Date	Cost	Part.	Anti-	Used	Aut	H	Latex	Oil	Pesticide		Fluor	Asbes	Other HHW		Total	Total HHW	
				Freeze	Oil	o	H	Paint	Paint	Solids	Liq	Bulbs		Solid	Liq	Drums	Liq	Solid
				(gal)	(gal)	o	H	(gal)	(gal)	(lbs)	(gal)	(lbs)	(lbs)	(lbs)	(gal)	(no.)	(gal)	(lbs)
Tioga	1995	35,435	504		504	20		2,701	1,332		288		10	270	185	66	5,010	770
Cayuga	1997	28,100	310	71		69	300		483	1,610	195			2,441	1,385	88	2,134	6,076
Tioga	1997	27,114	339						1,177					1,685		27	1,177	1,685
Schuyler	1997	9,939	89					440	165		220			680	165	16	990	680
Cayuga	1999	50,000	480	240	340	137	600	650	620	1,900	480	20		3,100	2,100	190	4,430	9,045

Source: Household Hazardous Waste Report, 1988 through 1999 Program Review, NYSDEC, April 2000.

New York State Department of Environmental Conservation  
Division of Solid and Hazardous Materials  
Bureau of Waste Reduction and Recycling



Managing and Disposing of  
Household Hazardous Waste

## TOPICS IN THIS PUBLICATION

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General Information

Acids and Bases

Aerosol Containers

Antifreeze and Brake Fluids

Automotive Batteries

Household Batteries

Household Cleaners and Personal Products

Mercury

Motor Oil and Automobile Products

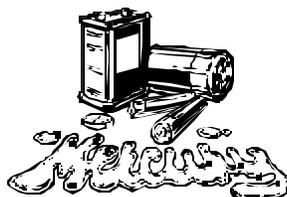
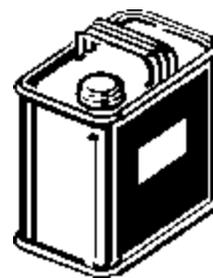
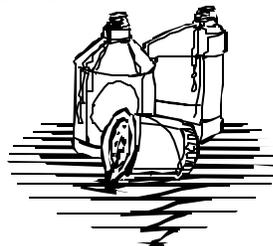
Paint

Pesticides

Thinners, Strippers and other Solvents

Wood Preservatives

Miscellaneous Chemicals



## FACTS ON HOUSEHOLD HAZARDOUS WASTE

We like to think of our homes as our castles. But most of us are not thinking of what's stashed in the basement, garage or under the kitchen sink. Take a look sometime. Do you see old cans of cleansers, paint, bug spray and used motor oil? How long has it been since you used this stuff? How will you get rid of it? Those types of waste contain hazardous substances which can pose risks to the environment, wildlife and human health. Hazardous substances have one or more special characteristics which include:



The potential to cause violent chemical reaction.



The potential to be dangerously corrosive.



The potential to ignite.



The potential to be harmful to human health(toxic).

Every year in New York State, more than 100,000 tons of these household hazardous wastes are emptied into trash cans. They end up in landfills or incinerators, or may be dumped onto backyard soil or into small streams. Household hazardous wastes enter the environment from lawns, backyards, sewers, landfills and incinerators. When disposed improperly, those wastes can poison the air, soil, water, birds, fish, mammals and even people and pets in the following ways:

- < Once in the landfill, liquid waste and rainwater can seep down through layers of trash picking up contaminants along the way. This will cause leachate to be more difficult and expensive to treat.
- < Streams and lakes, as well as groundwater, can become polluted where rain, melting snow and ice contact contaminated soil, sidewalks, streets and parking lots. Storm sewers drain directly into local waterways.
- < Emissions from incinerators can contaminate air and the ash residues, which contain heavy metals, also present disposal problems.

As residents of New York State, we bear the responsibility to dispose of our household hazardous waste properly in order to protect and preserve the quality of our groundwater, streams and lakes. In the following pages, you will find instructions on how to SAFELY dispose of most of the household waste chemicals you may have at home right now. You will also learn how to REDUCE your use of these products by buying or making alternatives so you'll have less to throw out in the future. Follow these steps and you will be making your home, your neighborhood and all of New York State a cleaner, greener place to live. It's easy and it's good for the earth!

## GENERAL INFORMATION

### WASTE REDUCTION

- , Use non-hazardous alternative products and materials when possible.
- , Only buy as much as you need when purchasing hazardous substances.
- , If you can't use it up, give it to someone who can. Schools and community groups may be especially grateful for donations of paint.

### SAFE STORAGE

- , Keep the product in its original container.
- , Never mix different chemical products.
- , Wrap the waste in newspaper and place in two layers of plastic garbage bags. Label the outside of the bag.
- , Store in an out-of the-way location, away from heat and children or pets. Ignitable wastes should be stored away from the house if possible.

It is always best to avoid disposing of hazardous household products, Try to buy only what you need. Look for less toxic alternatives. Recycle when possible. Give unused products to someone else who can use them (unless the product is a pesticide which has been banned or restricted).

If you are left with a product which is unusable, banned, not recyclable, or which cannot be given away, look on the label for disposal information. Be aware, however, that older containers of pesticides and other wastes may give instructions which are no longer appropriate. In cases such as these, or if the label gives insufficient information, you may need to store the waste until a household hazardous waste collection program is held in your area.

Certain household hazardous wastes identified in the following pages can be safely dried out or solidified. Cat litter (clay type with no chemical additives), disposable diapers, vermiculite and other products specifically designed for use with chemicals do not react with chemical wastes and may be safely used as absorbents. Air drying should always be done in a well-ventilated area away from children and animals.

Explosive wastes usually cannot be handled through household hazardous waste collection programs. Explosives include not only ammunition, but certain chemicals, such as picric acid, ether, and concentrated hydrogen peroxide (household strength is not explosive). If you have any of these wastes, contact your local police department for further information.

This information is provided only for individuals who need to dispose of wastes derived from their residential use. Disposal of wastes which are the result of any commercial or industrial activity **MUST** comply with applicable hazardous waste regulations.

## ACIDS AND BASES

Both acids and bases are corrosive materials and may cause damage upon contact with the skin, eyes or respiratory system. They may also react violently if mixed with other substances, including water.



Acids are corrosive materials commonly found in toilet bowl and drain cleaners, swimming pool chemicals and a number of other home cleaning products. These are easily identifiable on ingredient labels because they usually contain the word "acid." Bases are also corrosive, and may be found in bleaches, oven and drain cleaners, disinfectants and other Household products. They may be listed on labels as lye, hydroxide, hypochlorite or a variety of other terms.



### ALTERNATIVES

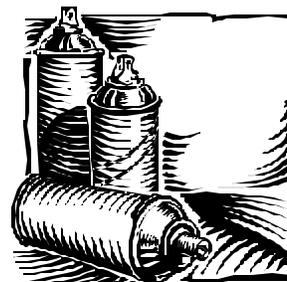
- i Keep drains clean by using strainers and keeping grease, hair and coffee grounds out of the drain. Flush drains weekly with boiling water or a cup of warm vinegar. Use a plunger or snake to free blockage.
- i To clean the oven, sprinkle baking soda or salt on spills with water and scrub with a steel wool pad.
- i Scrub toilets with baking soda or borax.
- i To polish metal, rub with a paste of baking soda and water; polish unlacquered brass, bronze or copper with a solution of equal parts of vinegar, flour and salt. Rinse and dry.

## DISPOSAL

- # If the acid or base is an ingredient in a useable consumer product, try to use it up or give it to someone else who can use it. Do not attempt to neutralize or treat the product yourself, as large amounts of heat may be generated and you could be burned. Never add water to an acid or base to dilute it, as this practice is dangerous. Acids and bases should be saved for a household hazardous waste collection program.

## AEROSOL CONTAINERS

Many hazardous materials, such as spray paints or degreasers, may be packaged in aerosol containers. This type of packaging can be dangerous because aerosol containers may explode under heat or pressure, spreading the hazardous contents and metal throughout the area. Also, the tiny particle size makes hazardous components easier to inhale and therefore more destructive.



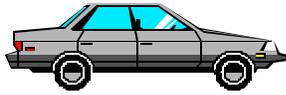
## ALTERNATIVES

- i Use non-aerosol products, such as pump sprays.
- i Keep indoor air clean-smelling by keeping an open box of baking soda in a room, or leaving a dish of vinegar or vanilla in a room for about an hour, or simmer in a saucepan of water pieces of orange, lemon or grapefruit to freshen air.

## DISPOSAL

- # Always try to use up the product or give it to someone else who can use it. The empty container can then be safely discarded with other household trash or recycled in some communities.
- # If you cannot use the product for its original purpose and the material that it contains is not hazardous, you may be able to empty it by spraying it outdoors into an empty box or paper bag and allowing the contents to dry. This must be done very carefully in a well ventilated area because the aerosol produce very small particles which may pose a significant health threat if inhaled.
- # If you cannot fully empty the aerosol container or if the materials it contains are hazardous, store it until a household hazardous waste collection program is held in your area.

## ANTIFREEZE & BRAKE FLUIDS



The primary component of new or used antifreeze is ethylene glycol, a toxic substance. Brake fluids are primarily propylene glycol, which is similar to and should be handled the same way as antifreeze. Pets and other animals are highly susceptible to antifreeze poisoning because they enjoy its sweet taste. Therefore it is very important that antifreeze never be allowed to form puddles in the work area. Antifreeze can also contaminate surface waters when improperly disposed.

### DISPOSAL

- # Clean, used antifreeze may be used as a substitute for the water that would normally be used to dilute the new antifreeze. Also, when replacing hoses, the antifreeze should be captured and reused. These actions reduce the volume of antifreeze requiring disposal.
- # Antifreeze can be recycled. Check with a local garage, public works department or motor vehicle salvage yard to see if you can recycle your antifreeze with theirs.
- # Never dispose of antifreeze down a storm sewer or on the ground.
- # If you can not find a location to recycle your antifreeze and you are connected to a local sewage treatment plant, call your local sewage treatment plant to see if they can adequately handle this waste. If so, small amounts of antifreeze may be safely poured down the sink or toilet diluted with plenty of water (at least one gallon of water per pint of antifreeze).
- # If your waste water leads to a septic tank or cesspool rather than a sewer system, do not dispose of your antifreeze this way. It will damage both systems as well as harm the groundwater. You should ask a friend or relative whose home is connected to a sewer to dispose of it for you, or save it for a household hazardous waste collection program.

## AUTOMOTIVE BATTERIES

Automotive batteries, also known as lead acid batteries, contain sulfuric acid and lead. These components are highly toxic. Lead can threaten groundwater supplies, and acid can severely burn skin. Store these batteries in an out-of-the-way place.



### DISPOSAL

- # Lead acid batteries are recyclable, and the improper disposal of lead acid batteries is prohibited by New York State Law. All lead acid batteries must be recycled or disposed of at a

hazardous waste facility. Retailers and distributors are required to accept two batteries per person per month at no charge. A \$5.00 charge will be imposed if you buy a new battery and do not return the old one. Other garages or scrap metal dealers may also be willing to accept batteries. Depending on the market price of lead, you may find that some dealers are willing to pay you for your old battery. Some landfills provide storage areas for used batteries, where they are accumulated for eventual recycling.

## HOUSEHOLD BATTERIES



There are many varieties of household batteries. Small "button" batteries, such as those used in cameras and hearing aids, may contain mercury, silver or lithium. Common flashlight batteries, which are usually carbon zinc or alkaline, may contain mercury if manufactured before 1992. Rechargeable batteries most often contain cadmium and nickel. Each of these metal components can pose health hazards. For example, mercury is highly toxic when inhaled, swallowed or absorbed through the skin.

### DISPOSAL

- # Several types of household batteries are recyclable, particularly small button batteries. Some towns collect batteries as a regular part of their source separation program and some electronic stores and jewelers accept batteries for recycling. Many household hazardous waste collection programs also accept batteries. If there is no collection program in your area, batteries should be securely stored out of the reach of children or pets and away from heat. Individual batteries may be discarded with other household trash if no collection program is available. You can reduce the number of batteries requiring collection or disposal by using rechargeable batteries, which last much longer than non-rechargeable types.

## HOUSEHOLD CLEANERS & PERSONAL PRODUCTS

Household cleaners and personal products include a very wide range of products found around the home, with an equally wide range of environmental and health risks.



## ALTERNATIVES

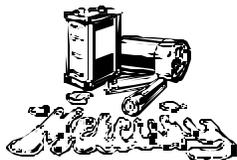
- i Clean windows with a soft rag or newspaper. Use 1/4 cup of vinegar in 1 quart of water or try 1/4 cup rubbing alcohol in 1 quart of water (use 2 teaspoons detergent for heavy soil). Spray it on and wipe dry.
- i Polish wood with a mixture of one tablespoon lemon oil and 1 quart mineral oil. Spray it on and rub in with cloth or just dip a cloth in olive, soybean or raw linseed oil.
- i Clean porcelain using a nylon pad or net that has been rubbed with a cut lemon or dabbed with baking soda paste or cream of tartar paste.
- i For bathroom and oven cleaners, see the information for *Acids and Bases*.

## DISPOSAL

- # It is always best to use up the product according to directions. If you can't use it, give it to someone who can. For products that must be disposed, check the label for instructions.
- # Never mix household cleaners. Bleach and ammonia, for example, react to form a deadly gas.
- # If a product is normally flushed down the drain during use, as most cleaners and detergents are, the product can usually be disposed by pouring, it down the drain slowly, with water running. Do not dispose of highly toxic or corrosive materials this way. These materials should be saved for a household hazardous waste collection day.
- # Metal polishes, wood polishes and waxes, and other solvent-based cleaners should be used up or safely stored for a household hazardous waste collection program.
- # Mothballs are flammable and toxic. Unusable mothballs should be safely stored until a household hazardous waste program is held in your area.
- # Avoid the use of septic tank cleaners or drain openers containing tetrachloroethylene, 1,1,1-trichloroethane or dichlorobenzene. Any product that contains any halogenated hydrocarbon, aromatic hydrocarbon, or halogenated phenol in an amount greater than one part per hundred by weight are prohibited from sale and/or use in Nassau and Suffolk Counties (Long Island) due to their potential to contaminate groundwater. If you have any of these products, do not use them up. They should be saved for a household hazardous waste collection program.

- # Most medications (except chemotherapy drugs) may be safely poured down the drain with running water. Large amounts of antibiotics may harm septic systems. If in doubt, call your doctor or pharmacist.

## MERCURY



Mercury is commonly found in older thermometers and some batteries. This substance is readily absorbed through the skin and is highly toxic. Mercury vapors can also be toxic when inhaled.

### DISPOSAL

- # Mercury can be recycled. University laboratories often save mercury for recycling and may accept small amounts to add to their own wastes. It may also be recycled (sometimes for a fee) by commercial operations. Mercury not recycled, should be saved for a household hazardous waste collection program. When storing and transporting mercury, however, be very careful to avoid any contact by keeping it well wrapped in a tightly sealed rigid container. Single mercury batteries may be discarded with household trash if no battery or household hazardous waste collection program is available.

## MOTOR OIL & AUTOMOBILE PRODUCTS

Used motor oil may contain toxic metals and organic compounds. Motor oil that is disposed on the ground or put into storm sewers may seep into groundwater and may contaminate drinking water supplies.



### DISPOSAL

- # Do not dispose of motor oil in the ground or sewers. New York State Law requires all service stations that change oil for their customers and retailers who sell more than 1000 gallons of oil per year to accept up to five gallons of used motor oil free of charge from members of the public (unless their storage tanks are temporarily full). This service may not be limited to customers of the establishment, so you may bring your oil to another station if the one you normally use is full. Some landfills also have used oil storage facilities available for public use.
- # Used motor oil can be recycled and service stations generally store used oil in tanks until it is collected by a recycler. Motor oil that is brought in to a service station will be recycled or otherwise handled properly. Your used motor oil can be easily transported by placing it in a clean plastic milk carton or similar container.

- # Service stations may also be able to accept transmission fluid, brake fluid, diesel fuel or kerosene. Do not mix these products together or with your used motor oil.
- # Gasoline is toxic and extremely flammable and should never be used as a cleaner. If small amounts of impurities are present in leftover gasoline, they may be filtered out using a strainer or coffee filter. Water may be eliminated by adding dry gas. It may then be diluted with fresh gasoline and used as fuel. If the gasoline cannot be used, bring it to a service station or save it in a proper gasoline storage container for a household hazardous waste collection program.

## PAINT



Most paints in use today are either latex or oil-based. Oil-based paints, including enamel, varnish and lacquer, contain solvents which can damage groundwater supplies unless precautions are taken. Latex paint manufactured before August 1990 may contain mercury, which may cause nerve and kidney damage. Also, some older paints may contain high levels of lead and can cause serious health problems if ingested directly or through contamination of drinking water supplies.

### ALTERNATIVES

- i Mix up your own whitewash for some jobs. The following recipe is for wood, glass or metal surfaces: Dissolve 15 pounds of salt or 5 pounds of dry calcium chloride in 5 gallons of water. In a separate container soak 50 pounds of hydrated lime in 6 gallons of water. Combine the mixtures, stir and thin with water until it is the consistency of whole milk. Yields 10 gallons and proportions can be reduced.

### DISPOSAL

- # To avoid disposal problems, try to buy only as much paint as you need. When you have leftover paint, try to use it up on a smaller project or give it away to someone else who can use it. Community groups, theater groups or schools may be able to put your leftover paint to good use. Latex paint which contains mercury should only be used outdoors.
- # Some communities now recycle latex paint. If yours does, keep the paint well covered and protected from freezing until the next collection day.
- # Paints that are too old or in too small quantities to be reused should be disposed of properly. Nonmercury-containing latex paint and small quantities (less than half full cans) of mercury-containing latex or oil-based paint can be allowed to dry out and harden. This should be done outdoors in an area with very good ventilation and away from children, animals or heat. This

process may be quickened by stirring the paint frequently, pouring the paint in layers into a cardboard box, or "painting" old pieces of wood or other materials. Cans containing hardened paint can then be disposed with other household trash, however, the lids should remain off. The paint may also be solidified by pouring it over clay cat litter and letting it dry out.

- # Half-full cans or more of mercury-containing latex or oil-base paint or any amounts of paint containing lead should be saved for a household hazardous waste collection program. Different colors of paint may be combined for easier storage, provided that the paints are of the same type (latex or oil-based). Make sure that the label clearly states the type of paint inside.
- # Artist paints often contain much higher levels of toxic metals than other paints and should not be handled as ordinary paint. These paints should be saved for a collection program. Aerosol paints must also receive special handling and should be saved for a collection program.

## PESTICIDES

Pesticides are chemicals that are intended to kill unwanted insects, animals, plants or microorganisms. These products may also be toxic to humans or pets. Many pesticides are not biodegradable; they accumulate in the environment and could eventually contaminate groundwater and food supplies. Pesticides include not only commonly recognized insecticides and herbicides but also products such as wood preservatives, flea products and some insect repellents.



### DISPOSAL

- # Many pesticides have been banned from use by both homeowners and licensed applicators within New York State because they pose high risks to human health or to the environment. Others are restricted to use by licensed applicators. These products should not be used by citizens or carelessly thrown away, but should be saved for a household hazardous waste collection program. If the pesticide is not banned or restricted, however, it is best to use the product up according to label directions or give the product to someone else who can use it for its intended purpose. Otherwise, it should be stored until a household hazardous waste collection program is held in your area.
- # To safely store pesticides, keep them in their original container, wrap them in newspaper and place them inside a double layer of plastic garbage bags. Always keep them out of the reach of children and away from heat and pets.
- # Empty pesticide containers should be triple rinsed before being thrown away. The rinsewater should be saved and used as a pesticide. The empty container should then be wrapped in newspaper and discarded with household trash.

The following pesticides are banned or restricted in New York State and should not be used or thrown away (as of November, 1998):

### Restricted Use

(licensed applicators only)

Acrolein	Ethoprop (Mocap)
Acrylonitrile	Famphur
Aldicarb (Temik)*	Fenamiphos (Nemacur)
Aluminum phosphide (Phostoxin)	Fenthion (Baytex)
Antu	Formetanate hydrochloride (Carazol SP)
Arsenic (inorganic compounds)*	Fumarin
Avitrol	Guthion
Azodrin	Isofenphos (Oftanol, Amaze)
Bidrin	Lethane 384
Bomyl	Lindane*
Brodifacoun (Talon)	Magnesium phosphide
Bromadiolone (Maki)	Methiocarb (Mesurol)
Bromethalin	Methomyl (Lannate)
Carbon disulfide	Methyl bromide
Carbofuran (Furadan)	Methyl parathion
Carbophenothoin (Trithion)	Mexacarbate (Zectran)
Chlorfenvinphos (Birlane)	Monitor
Chlorophacinone (Rozol)	Nicotine alkaloid
Chloropicrin	Nicotine salts
Chlorpyrifos	Oxamyl (Vydate)*
Cholecalciferol (Quintox)	Paraquat
Cyanides	Parathion
Cyclohexamide (Actidione)	Pentachlorophenol
Daminozide (Alar)	Permethrin
Dasanit	Phorate (Thimet)
Demeton (Systox)	Phosdrin
Dinitrophenol	Phosphamidon
Dinoseb (DNBD or DNOSBP)	Phosphorus (white or yellow)
Dioxathion (Delnav)	Pival
Diphacinone	PMP, Valone
Di-Syston	Radox
DNOC	Schradan (OMPA)
DNOCHP	Sodium fluoroacetate*
Dyfonate	Strychnine and its salts
Endosulfan (Thiodan)	Sulfotepp
EPN	Sulfuryl fluoride (Vikane)
Ethion	Supracide
	Terbufos (Counter)
	TEPP
	Tributyltin

Vapona (dichlorvos, DDVP)  
Warfarin  
Zinc Phosphide  
Zinophos

### **Banned**

Aldrin  
Bandane  
BHC (benzene hexachloride)  
Chlordane  
DBCP (dibromochloropropane)  
DDD, TDE  
DDT  
Dieldrin

Endrin  
Heptachlor  
Mercury compounds  
Selenites and selenates  
Silvex (2,4,5-TP)  
Strobane  
2, 4, 5-T  
Thallium  
Toxaphene

\* Use restricted to limited purposes

## **THINNERS, STRIPPERS & OTHER SOLVENTS**

Solvents may cause serious health effects if they come into contact with the skin or eyes or are inhaled. Excessive solvent exposure can cause a wide range of symptoms, many quite serious. The most damaging are the halogenated solvents, which are often found in paint strippers, spot removers and degreasers.

### **USING SOLVENTS SAFELY**

- i Read labels carefully.
- i Use gloves, goggles and respiratory mask when appropriate.
- i Never smoke when using solvents and never use them near fires.
- i Use excellent ventilation and work outside when possible. Don't use solvents on hot, muggy days.
- i Use water-based products where possible - they require less cleanup and less solvent.
- i Never eat or drink where solvents are being used - fumes can be absorbed by food or utensils and you may accidentally ingest them.

### **DISPOSAL**

- # Most solvents are recyclable, although this is not always practical to do at home. Always try to use up the product in its intended manner. Paint thinners that have paint mixed into them can be reused by capping the container tightly and allowing the paint to settle to the bottom of the

container (this process may take several months for large volumes). The clean solvent may then be poured off the top and reused and the sludge that is left can be allowed to dry out (preferably outdoors) and then discarded. Paint thinners can also be used up by mixing them into oil-based paints or can be reused after filtering them through a coffee filter.

- # Solvents which contain chlor-, chloro-, or a similar phrase in their chemical name are chlorinated, which is one type of halogenated solvent. Other types may include such phrases as fluoro-, bromo-, or variations of these. These halogenated solvents should be handled carefully.
- # Waste solvents should be stored until a household hazardous waste collection program is held in your area. If the solvents must be disposed immediately, then very small amounts (less than one cup) of nonhalogenated solvents can be evaporated by mixing the solvent with an absorbant and leaving the solvent mixture outdoors. When the absorbant is fully dried, it should be wrapped in a plastic bag and placed with other trash. This should be done carefully so that children or animals cannot come into contact with the chemical. Always ensure proper ventilation when evaporating solvents.

## WOOD PRESERVATIVES

Wood preservatives are generally a combination of a solvent and a pesticide. These mixtures are highly toxic and must be handled very carefully. Pentachlorophenol and creosote should only be used by individuals who have had training in their safe use. Finally, wood that has been treated with any of these products should never be used as firewood since toxic air contaminants could be emitted during burning.

### ALTERNATIVES

- i Use wood that is naturally weather and insect resistant such as cedar, honey locust or oak. As an alternative, use plastic lumber.
- i Employ construction techniques that protect wood from dampness or insects

### DISPOSAL

- # Wood preservatives that do not contain creosote or pentachlorophenol should be used up. If you can't use them, give them to someone who can. Leftover creosote, pentachlorophenol or other unusable products should be left in their original containers, placed in a double plastic bag, stored out-of-the-way and saved for a household hazardous waste collection program. If there is no such program held in your area, then very small quantities (less than one cup) of wood preservatives other than pentachlorophenol or creosote may be solidified with clay cat litter and discarded with your household trash.

## MISCELLANEOUS CHEMICALS

**PHOTOGRAPHIC CHEMICALS** may contain a number of toxic or corrosive ingredients and should be handled very carefully. Photographic chemicals that contain silver, such as photographic fixer solutions, can be reclaimed. Ask a local photographer or photo finishing lab if they can recycle your wastes. Otherwise, the chemicals are best brought to a household hazardous waste collection program. Small amounts (less than one pint) of photographic chemicals may be poured down the drain, if necessary, provided that they do not contain silver, hexavalent chromium or ferrocyanide.

**SWIMMING POOL CHEMICALS** contain chlorine, acids, or calcium hypochlorite an oxidizer). These materials are corrosive and may cause burns or injury on contact or if swallowed or inhaled. They may also pose a fire hazard. They should be stored carefully, away from any source of heat or spark, and saved for a household hazardous waste collection program.



**SMOKE DETECTORS** may be either photoelectric or ionizing. The ionizing variety is radioactive and may pose hazards to human health if large quantities are accumulated. However, single detectors may be safely discarded with household trash. Some smoke detectors can be returned to the manufacturer. Check the package of the new smoke detector to see if they offer a return service.

**TRANSFORMERS & FLUORESCENT LIGHTS** manufactured before 1978 may contain polychlorinated biphenyls (PCBs). These materials are highly toxic and should be safely stored until they can be taken to a household hazardous waste collection program. Fluorescent light bulbs may also contain mercury, and should be brought to a recycling program or a household hazardous waste collection if one is available in your area.

**ASBESTOS** has been shown to be dangerous when inhaled. If your home contains asbestos products, do not attempt to remove them yourself. Improperly removing asbestos may be more dangerous to your health than leaving it undisturbed. If the asbestos is encased or appears to be in a solid mass (not easily crushed), then it may not pose any significant health hazards. If you have any questions regarding asbestos removal, you should consult your local Health Department or a professional asbestos contractor.

**GAS CYLINDERS** can often be refilled and many retailers will accept used gas cylinders. Cylinders which are completely empty and have the valve removed may be recycled.



## FOR FURTHER INFORMATION

Write or call your NYSDEC Regional Office (see the regional map below) or contact the NYSDEC Division of Solid & Hazardous Materials at 518-457-7337.

### FOR INFORMATION ON HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAMS IN YOUR AREA

Contact your local Department of Public Works or Solid Waste Management Authority.

#### REGIONAL OFFICES

- 
- Region 1** Nassau and Suffolk Counties (631) 444-0354
- Region 2** Brooklyn, Bronx, Manhattan, Queens and Staten Island (718) 482-4900
- Region 3** Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster and Westchester Counties (914) 256-3000
- Region 4** Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, and Schoharie Counties (518) 357-2234
- Region 5** Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren and Washington Counties (518) 897-1200
- Region 6** Herkimer, Jefferson, Lewis, Oneida and St. Lawrence Counties (315) 785-2239
- Region 7** Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga and Tompkins Counties (315) 426-7400
- Region 8** Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Schuyler, Steuben, Wayne, and Yates Counties (716) 226-2466
- Region 9** Allegany, Cattaraugus, Chautauqua, Erie, Niagara and Wyoming Counties (716) 851-7000



New York State Department of Environmental Conservation  
 Division of Solid and Hazardous Materials  
 Bureau of Waste Reduction and Recycling

## HOUSEHOLD HAZARDOUS WASTE DISPOSAL and ALTERNATIVES CHART



- U** - Use up according to label directions
- T** - Wrap and discard with other household trash
- P** - Pour down drain slowly with plenty of water
- S** - Save for a household hazardous waste collection program
- D** - Dry out and then discard with other household trash
- R** - Take to a Recycling center

PRODUCT	DISPOSAL	ALTERNATIVES
<b>Cleaners</b>		
general purpose liquid	<b>U P</b>	vinegar or lemon juice diluted with water; or three tablespoons washing soda in 1 quart water
scouring powder	<b>U T</b>	baking soda, salt, or borax
metal polishes	<b>U S</b>	use baking soda paste
furniture polish	<b>U S</b>	dip cloth in olive, soybean, or raw linseed oil; or mix 2 tablespoons olive oil with 1 tablespoon vinegar and slowly stir into 1 quart water
rug cleaners	<b>U S</b>	sprinkle baking soda on rug then vacuum; use club soda on stains

spot removers	<b>U S</b>	clean spill quickly with club soda, or use baking soda paste on stains
toilet bowl cleaner	<b>U P</b>	flat cola, borax, or baking soda
oven cleaner	<b>U S</b>	wipe up spills quickly; wash with baking soda using a scrubber; or sprinkle with baking soda or salt, let sit, and then rinse

### Home Maintenance

latex paint	<b>U D</b>	use whitewash or milk paint
oil-based paint	<b>U S</b>	use latex paint when possible
paint thinner	<b>U S</b>	let paint settle out and then reuse
glues/adhesives	<b>U D S</b>	use white or yellow glue; let glue dry out if it is water based; save if solvent based
drain opener	<b>U S P</b>	prevent problems by using strainer and flushing pipes weekly with boiling water; use a plunger or snake; and put 1/2 cup each vinegar and baking soda down the drain, flushing 15 minutes later
air freshener	<b>U T</b>	use flowers, herbs, or potpourri; place vinegar or vanilla in an open dish; or clean the source of the odor with baking soda
degreasers	<b>U S</b>	detergents
paint stripper	<b>U S</b>	sand or scrape paint

### Auto Repair

motor oil	<b>R</b>	none
antifreeze	<b>R P</b>	none
gasoline	<b>S</b>	none; do not use as a cleaner
vehicle batteries	<b>R</b>	none
carburetor cleaner	<b>S</b>	none

### Pesticides

bug sprays/insecticides	<b>U* S</b>	handpick or trap pests; keep household clean and food covered; caulk or seal entryways
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weed killer	U* S	maintain a healthy lawn by adjusting the pH to 6.5, mowing high with a sharp blade, and watering deeply when the soil is too dry
flea killers	U* S	use a flea comb, vacuum often, and wash pets bedding
wood preservatives	U* S	use wood that is naturally resistant (cedar, honey locust, oak) and protect from dampness and insects; look for recycled plastic lumber
disinfectant	U* S P	borax or pine oil with soap
insect repellent	U* S	don't wear scented products outdoors; and burn citronella candles, punk, or incense
<b>Hobby/Miscellaneous</b>		
photographic chemicals	U S P	none
artist paints	U S	use water-based products whenever possible
swimming pool chemicals	U S P	none
household batteries	R S T	use rechargeable batteries
aerosols	T S	use pump or liquid; if not hazardous, wrap it up and discard with other household trash; save for a household hazardous waste collection program if it contains hazardous materials
mothballs	U S	keep garments clean; wrap in linen or seal in paper packages or cardboard boxes; use cedar chips; kill eggs by running dry garment through a warm dryer

**ALWAYS READ ALL PRODUCT LABELS CAREFULLY!**

**\* - Do Not Use Up Pesticide Products Which Have Been Banned or Restricted**

Disposal recommendations are listed in order of preference. This chart only provides a small example of the known substitutes, not all are completely non-toxic. Use all hazardous products with care. Many of the possible alternatives listed in this chart have been taken from *Household Hazards: A Guide to Detoxifying Your Home*, published by the League of Woman Voters of Albany County, New York.

# Household Hazardous Waste

## AUTOMOTIVE PRODUCT DISPOSAL

Automotive Products that may be harmful include:

Used motor oil • Brake fluids • Antifreeze •  
Gasoline and diesel fuels • Batteries • Car waxes with solvents •  
Carburetor cleaners •

### What To Do with Leftover Automotive Products

- Save them for future use, or give them to someone who can use them.
- Take used motor oil to a recycling facility, service station or retailer. State law requires service stations or retailers that sell more than 1,000 gallons a year of oil, to accept, free of charge, up to five gallons of used motor oil per person, per day. If a service station or retailer refuses your oil, contact your DEC regional office.
- Take used car batteries to retailers that sell new batteries. State law requires retailers to accept, free of charge, up to two used batteries per person, per month for recycling.
- Never mix automotive products, or pour them into storm drains, septic systems, or on the ground.
- Call your local sewage treatment plant to ask if you can flush small amounts of antifreeze down the drain.
- Save leftover materials for a household hazardous waste collection program.

**Always read the label for safety precautions,  
even if you are familiar with the product.**

**Remember improper disposal of these products  
can harm the environment.**



## ALWAYS CONSULT THE PRODUCT LABEL

Labels provide information about proper use and alert you if the product is potentially hazardous.

### Look for:

- ✓ Signal words -  
**DANGER, POISON, WARNING or CAUTION.**
- ✓ Statements of hazards -  
**“Flammable,” “Vapor harmful,” “Harmful or fatal if swallowed.”**
- ✓ Precautionary statements -  
**“Keep out of reach of children,” “Use only in well-ventilated areas,” “Do not mix with chlorine-type bleaches or other chemicals.”**

Store Household Hazardous Waste Properly and Safely Before Disposal

- G Keep the product in its original container with the label intact.
- G Place leaking containers in larger, leak-proof containers clearly labeled with the contents.
- G Store products out of reach of children and pets, away from heat, and away from the house, if possible.
- G Store liquid flammables in their original containers or UL-approved metal safety cans, available from hardware stores.
- G Reduce disposal problems by using smaller amounts of hazardous substances, or by substituting less hazardous substances where possible.

**FOR MORE INFORMATION on household hazardous waste, contact:**

NYS Department of Environmental Conservation  
Bureau of Waste Reduction & Recycling  
Division of Solid & Hazardous Materials  
50 Wolf Road, Albany, NY 12233-7253  
Tel: (518) 457-7337

**Note: The information on this card applies only to home-generated wastes.  
Businesses and organizations must comply with all applicable state and  
federal hazardous waste regulations.**

# Household Hazardous Waste

## CLEANING & MAINTENANCE PRODUCT DISPOSAL

Common household cleaning & maintenance products containing hazardous substances include:

•Kitchen & bathroom surface cleaner • Oven cleaners • Drain openers • Disinfectants • Bleach • Carpet deodorizers • Polishes & Waxes • Air fresheners • Ammonia • Adhesives •

Some of these products can be:

**Corrosive:** can destroy metal and burn skin;

**Flammable:** can easily catch fire when ignited;

**Reactive:** may react violently by bubbling, foaming, or releasing heat when exposed to air or water;

**Toxic:** can harm or kill living organisms.

### What to do with Leftover Cleaning & Maintenance Products

- Save them for future use, or give them to someone who can use them.
- Some chemicals, such as tub and tile cleaners, are diluted with water during use. You can dispose of small amounts by flushing them down the drain with plenty of water.
- Never** mix cleaning or maintenance products together, **never** pour them on the ground, or into storm drains or streams.
- Save leftover materials for a household hazardous waste collection program.

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# Household Hazardous Waste



## PAINT DISPOSAL

Paints commonly used in households:

**Water-based:** latex - least harmful, may contain mercury;

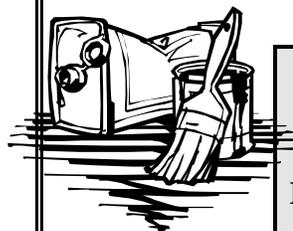
**Oil-based:** enamel, lacquer, shellac and varnish -  
contains solvents;

**Hobby or artist:** coloring paints - may contain solvents or  
heavy metals;

**Aerosols:** spray paints - contain solvents and propellants.

### What You Should Do with Leftover Paints

- ✓ Use them up or give them to someone who can.
- ✓ Dry unwanted latex and small amounts (less than one-half gallon) of oil based paints outdoors, away from children and animals and discard with household trash. Remove paint can lids so trash removers can see that the cans are empty or the paint is dry.
- ✓ If the paint cans are empty, call your recycler to see if the empty cans can be recycled.



**Always read the label for safety precautions, even if you are familiar with the product.**

**Remember, improper disposal of these products can harm the environment!**



## ALWAYS CONSULT THE PRODUCT LABEL

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# Household Hazardous Waste

## PESTICIDE DISPOSAL

Pesticides are chemicals that kill pests, including animals, plants, molds and insects. These are examples of household pesticides:

Insect sprays • Flea products • Mothballs • Rodent poisons • Weed killers • Wood preservatives •

✓**NEVER** dump unwanted pesticides down the sink or toilet, into storm drains, streams, or on the ground.

✓**NEVER** use treated wood as firewood.

### What To Do with Leftover Pesticides

- Save them for future use, or give them to someone who can use them, unless they are banned or restricted.
- When using up a pesticide that requires dilution, triple-rinse the container, and use the rinse water to dilute the last batch.
- Drain all containers used to mix or store pesticides for at least 30 seconds.
- Discard clean, empty pesticide containers (including aerosols) in the household trash.
- Save all leftover pesticides for a household hazardous waste collection program.

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# Household Hazardous Waste

## SOLVENT DISPOSAL

Common household products that contain solvents include:

Paint thinners • Nail polish remover • Paint and varnish strippers •  
Spot removers and degreasers • Polishes •  
Septic tank cleaners •

Solvents can be toxic and/or flammable. Solvents or solvent fumes can harm skin, eyes and lungs. Halogenated solvents, those with chemical names such as chloro-, fluoro- & bromo-, can cause the most serious health effects. Some solvents may also cause serious environmental hazards.

### What To Do with Leftover Solvents

- Save them for future use, or give them to someone who can use them.
- Reuse paint thinner, mineral spirits and turpentine. Tightly cap the container and let the paint sludge settle - several months may be needed for large amounts. Pour off the clean solvent and reuse. You can also remove paint sludge with coffee filters. Dry collected sludge outdoors and discard with household trash.
- Mix small amounts (less than one cup) of leftover non-halogenated solvents with an absorbent such as clay cat litter (no additives) and dry the mixture outdoors. Wrap dried absorbent in a plastic bag and discard with household trash.
- Save leftover materials for a household hazardous waste collection program.

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