

**CONSUMER'S GUIDE**  
**TO**  
**HOUSEHOLD**  
**HAZARDOUS WASTE**

Mississippi Department of  
Environmental Quality  
P.O. Box 10385  
Jackson, MS 39289-0385  
601/961-5171  
[www.deq.state.ms.us](http://www.deq.state.ms.us)

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## **HOUSEHOLD HAZARDOUS WASTE**

Our homes typically contain three to eight gallons of hazardous products that we use everyday. Flammable materials constitute 48% of all household hazardous waste. As much as 100 pounds of household hazardous waste may accumulate before residents move or conduct a major cleanup. Oven cleaners, drain openers, yard chemicals, used motor oil, paint thinners are just a few items which, when disposed improperly, can be harmful to people, wildlife, and the environment. These products may be 1) toxic – poisonous or capable of causing acute illness, 2) flammable – burns easily, 3) corrosive – burns through other materials (acids), and 4) reactive – capable of exploding if exposed to heat, air, water or shock; and are known as “household hazardous wastes” when they are disposed. Although the products are regulated under State and Federal Hazardous Waste laws when produced by a commercial organization or a business, the laws exempt these wastes from regulation when they are generated by a household.

Participating in household hazardous waste collection programs will 1) reduce the impact of toxic chemicals in landfills and incinerators, 2) rescue waste by recycling useful materials such as paint and household cleaners, 3) protect land and water resources, and wildlife from the effects of carelessly disposed hazardous materials, 4) make homes safer by encouraging disposal of household materials that cause harm if carelessly stored or handled, 5) protect sanitation workers and firefighters from carelessly handled hazardous waste, and 6) create a focus for education both adults and children about household hazardous waste.

The Mississippi Department of Environmental Quality with assistance by the Alabama Department of Environmental Management compiled these guidelines based on the best information currently available and addressed the most common chemical wastes found in the home. Questions about these or any other type wastes may be directed to:

**Mississippi Department of Environmental Quality**  
**P.O. Box 10385**  
**Jackson, MS 39289-0385**  
**601/961-5171**  
**[www.deq.state.ms.us](http://www.deq.state.ms.us)**  
**(Click on “Recycling” then on “FAQs”)**

## **GENERAL INFORMATION**

The best alternative to disposing of household hazardous products is to first avoid generating them. Disposal of these wastes may be reduced or eliminated by only buying the amount of these products that you actually need, giving the usable product to someone who can use it (unless it is a banned or restricted pesticide), recycling the material when possible and looking for less hazardous alternatives.

If you are left with a hazardous product which is unusable, nonrecyclable, or banned, look on the container label for disposal instructions. If there is not sufficient information on the label or if the waste is an older container of pesticide which may have out-of-date information, you may need to safely store the material until a household hazardous waste collection program/event if

held in your area. Should you need to store hazardous products, you should always leave the material in the original container, provided the container is in good condition, and never mix other chemicals with it. The material should be wrapped in newspaper, placed in a plastic garbage bag and stored in an out-of-the-way location away from children, pets, and heat. If you need information regarding household hazardous waste collection programs in your area, please contact your city or county Solid Waste Management Department, or the Mississippi Department of Environmental Quality at 601/961-5171.

Grants are available to cities and counties to initiate a Household Hazardous Waste Collection Event, depending upon available funding. For an application and general grant information, city and county governments may contact:

Mississippi Department of Environmental Quality  
Right-Way-To-Throwaway Grant Program  
P.O. Box 10385  
Jackson, MS 39289-0385  
601/961-5171

**This information applies only to hazardous wastes generated by individuals from their residential use. Hazardous wastes generated by businesses or commercial activity must comply with the applicable hazardous waste regulations.**

## **AEROSOL CONTAINERS**

Products such as spray paint, hair spray, or degreasers are often packaged in aerosol containers. Since aerosol containers may explode under pressure or excessive heat, these materials present a special hazard. You should always try to use the entire contents of the product or give it to someone who can use it. The empty container may then be 1) recycled if your community is recycling steel cans and aerosol containers, 2) recycled at the local scrap yard, or 3) disposed with other household trash.

If you cannot use the product for its intended purpose, and cannot find someone who can use it, you could bring the aerosol containers to a household hazardous waste collection program/event if one is conducted in your area. As a final alternative, you may be able to empty the aerosol container by spraying the material into a box or paper bag and allowing the contents to dry. This should always be done outdoors or in a well ventilated area.

## **AUTOMOTIVE PRODUCTS**

Used motor oil, antifreeze and brake fluid are just a few automotive products that can be harmful to the environment if improperly disposed. These products should never be mixed and you should never pour them on the ground, down the storm drain, or into a septic system.

**Antifreeze and Brake Fluid** – Antifreeze primarily consists of a toxic substance known as ethylene glycol. Brake fluid consists of a similar substance known as propylene glycol and

should be handled in the same manner as antifreeze. Antifreeze can contaminate surface waters and, although highly toxic, is particularly appealing to pets because of its sweet taste. Clean, used antifreeze may be used as a substitute for the water that would normally be used to dilute new antifreeze. Small amounts of waste antifreeze (no more than one gallon per day) may be safely disposed by pouring down the sink or toilet followed by several gallons of water. You should, however, check with your local sewage treatment facility to ensure that they are equipped to handle this waste.

If your home is connected to a septic tank system, you **should not** dispose of antifreeze in this manner as it may harm the system and may contaminate groundwater. In this case, the material may be taken to a friend or relative whose home is connected to the city's or county's sewage treatment system. Preferably, take antifreeze and brake fluid to a household hazardous waste collection program/event if one is conducted in your area.

**Used Motor Oil** – Used motor oil should never be disposed of on the ground, in a ditch, creek, river, or lake; in a storm drain; or in the garbage because it may contain toxic metals or solvents. Used motor oil that is improperly disposed may contaminate surface water and/or groundwater.

The motor oil remaining in the oil filter should also be drained and recycled. Do this by puncturing the dome end of the oil filter with a screwdriver and draining the oil while it is still hot through that punctured end for a minimum of 12 hours. Many oil change establishments will accept your used motor oil for recycling. In addition, Advance Auto Parts, Auto Zone and Wal-Mart Tire and Lube Express Centers will take up to 3 gallons of used motor oil from the public. A listing of residential used motor oil collectors in your area may be obtained by contacting the Recycling and Solid Waste Reduction Program at the Mississippi Department of Environmental Quality at 601/961-5171 or visit our website at [www.deq.state.ms.us](http://www.deq.state.ms.us) for a complete list. You could also save your used motor oil and bring it to a household hazardous waste collection program/event if one is conducted in your area.

## **BATTERIES**

**Lead Acid Batteries (Automobile and other vehicle batteries)** – Automotive batteries are prohibited from being disposed in landfills by state law. Automobile batteries contain sulfuric acid and lead, both of which can be hazardous to human health and the environment. Batteries should be handled carefully because acid can cause severe burns. Automotive batteries are recyclable. In fact, if you purchase an automotive battery in Mississippi, the retailer is required by state law to take your old battery in return. If you have several batteries accumulated over the years, an automotive repair shop, recycling facility or battery retailer may accept them. You could take them to a household hazardous waste collection program/event if one is conducted in your area or to a local battery retailer in your area.

**Household Batteries** – Household batteries include common flashlight batteries, rechargeable batteries, and small button type batteries used in cameras and hearing aids. Some of the batteries contain toxic metals such as mercury, silver, cadmium or lithium. Rechargeable batteries used in cellphones, laptop computers and cordless power tools can be recycled in many areas across the United States. Call 1/800-8-BATTERY for the nearest drop-off site for rechargeable batteries.

The normal alkaline non-rechargeable batteries are almost impossible to recycle in most areas of the United States and should be discarded with other household trash.

## **GASOLINE**

Gasoline that has been stored for several years in your garage or in an engine may often be unusable after a period of time. Contaminants such as dirt and rust can cause problems if the fuel is used in an engine. Do not pour any type of fuel such as gasoline down a household sink or toilet due to possible ignition of fumes inside the home or in the sewer system. The best way to dispose of small amounts of gasoline or other similar fuel is to set it outside and allow it to evaporate. Do not allow the fumes to accumulate near an area where a hotwater heater is or other potential source of ignition. Quantities of less than two gallons can be brought to a household hazardous waste collection program/event if one is conducted in your area.

## **HOUSEHOLD CLEANERS**

Bleach, oven cleaner, drain openers, polishes and waxes are just a few items commonly found in the home which present a wide range of potential environmental and health risks. The most effective method to prevent disposal of the materials is to use all of the product for its intended purpose according to label instructions. Household cleaners such as bleach and ammonia products should never be mixed because a toxic chemical reaction may occur. Many products which are normally flushed down the drain during use may also be disposed of in this manner provided it is poured in small amounts followed by several gallons of water. If you are on a septic system, it is recommended that the material not be disposed of in this manner as it may harm the system and may contaminate groundwater. Small quantities of these products may be taken for disposal to a friend or relative whose home is connected to a city's or county's sewage treatment system. You could also bring old or unused household cleaners to a household hazardous waste collection program/event if one is conducted in your area.

**Solvent based cleaners** such as spot removers and degreasers often contain chlorinated solvents. Solvents which contain chlor, chloro-, or similar phrase contain chlorinated solvents, which is one form of halogenated solvent. Other types of halogenated solvents may include such phrases as fluoro-, bromo- or other variations. These should be handled carefully. Solvent based cleaners should not be evaporated because inhaling the fumes can pose a serious health hazard. If you cannot use the product for its intended purpose, it should be given to a friend or relative who can use it. You can also bring the material to a household hazardous waste collection program/event if one is conducted in your area.

**Waxes and metal or wood polishes** often contain solvents. You should always try to use the entire contents of the product or give it to someone who can use it. You can also bring the material to a household hazardous waste collection program/event if one is conducted in your area. As a final alternative for disposal, the material may be disposed of by flushing down the toilet followed by several gallons of water. If you are on a septic system, it is recommended that the material not be disposed of in this manner as it may harm the system and may contaminate groundwater.

## PAINTS AND PAINT THINNERS

The majority of paints used today are either oil-based or latex. Oil-based paints contain solvents which can be toxic to the environment. Latex paints manufactured before August, 1990 may contain mercury, a toxic metal. Also, some older paints may contain lead, which is known to cause a wide variety of health problems in humans. Since the label may not indicate that the paint contains mercury or lead, paint manufactured before 1990 should be used only on outside projects.

**Paints** – Paint is one of those wastes that is hard to dispose of when you no longer need it. That is why it is important to purchase only the quantity of paint you will need to do a satisfactory paint job. Useable paint may also be donated to community outreach groups, local community projects, schools, churches, local shelters and theater groups in your area. You could also save your paint and bring it to a household hazardous waste collection program/event if one is conducted in your area. As a very last alternative for latex or water-based paint, remove the paint can lid, or leave it on but punch holes in the lid and let the paint can sit out in a covered dry area for a week or two to allow the liquid to evaporate. The remaining dry pigment solids will remain and you may dispose of the can in your regular trash or recycle the metal can at a local recycling facility. This process will not work with oil-based paints. Oil-based paints and even latex paints should be mixed with kitty litter or other absorbent material, allowed to dry completely and thrown away with normal garbage. The Recycling and Solid Waste Reduction Program at the Department of Environmental Quality has a brochure titled “ Proper Disposal of Paint and Thinner” that is free to anyone requesting a copy(s). To receive a free copy call 601/961-5171, or visit our website at [www.deq.state.ms.us](http://www.deq.state.ms.us).

**Paint Thinners and Solvents** – Paint thinners contain solvents which can pose a serious risk to human health and the environment. Precautions should be taken when handling these materials as exposure can cause a wide variety of serious health effects. Solvents can also present a significant threat for groundwater contamination.

Paint thinner that has been used to clean brushes and supplies can be cleaned and reused several times. To do this, pour the used thinner in a transparent container with a good seal and store away from children, pets and heat. Depending on the amount of solvent you have, in a few days or weeks the dissolved paint will have settled to the bottom. The clean solvent can then be poured off the top into another container and reused. This thinner can be reused and recycled in this manner several times. The remaining paint sludge should be allowed to dry completely in a well ventilated area away from children and pets. The dried sludge can then be disposed with other household waste.

If you cannot use the product, or you cannot find someone that can use it, safely store it until yours or a nearby community holds a household hazardous waste collection program/event. If the original container is not in good condition, the material should be carefully transferred to a compatible container and labeled with a description of the product, handling and disposal instructions according to the product label and the date when the material was transferred.

## PESTICIDES

The three most common categories of pesticides are herbicides, designed to kill plants; insecticides, designed to kill insects; and rodenticides, designed to kill rodents. The best way to eliminate leftover pesticide is to use it for its intended purpose, in accordance with label directions. Pesticide containers should be rinsed three times with water and the rinse water should be used just as you would use the pesticide. After proper rinsing, empty pesticide containers should be disposed with other household trash. You should never reuse or burn an empty pesticide container because it will release toxic fumes which are hazardous to the environment.

If you cannot use the pesticide, give it to someone who can use it for its intended purpose. Never use or give away pesticides that are banned or unlabeled. Most banned pesticides will contain one of the following ingredients. Check the product label for:

Aldrin	Silvex
Chlordane	Sodium Arsenate (more than 2%)
DDT	Sodium Cyanide
Dieldran	Toxaphene
Endrin	2, 4, 5-T

This is not a complete listing of banned pesticides. If the pesticide is more than ten years old, contact the Mississippi Agriculture and Commerce Department at 601/885-9090 to determine if it is banned.

If you or someone else cannot use the pesticide, or the pesticide is banned or unlabeled, bring the material to a household hazardous waste collection program/event if one is conducted in your area. The material should be securely stored in the original containers, if the container is in good condition, away from children, pets, and heat until it can be taken to a household hazardous waste collection site. If the original containers is not in good condition, the material should be carefully transferred to a compatible container and labeled with a description of the product, handling and disposal instructions according to the product label, and the date when the material was transferred.

## SWIMMING POOL CHEMICALS

Swimming pools chemicals contain chlorine, calcium hypochlorite, strong bases, or strong acids. These materials are corrosive and can cause severe burns to the skin and may also present a fire hazard.

If you cannot use the product, or you cannot find someone that can use it, safely store it until yours or a nearby community holds a household hazardous waste collection program/event. If the original container is not in good condition, the material should be carefully transferred to a compatible container and labeled with a description of the product, handling and disposal instructions according to the product label and the date when the material was transferred.



## **WOOD PRESERVATIVES**

Wood preservatives are generally a highly toxic mixture of solvents and pesticides and should be handled with extreme caution. Two wood preservatives, pentachlorophenol and creosote, should only be used by individuals that have been trained in their safe use. Also, wood that has been treated with wood preservatives should never be used as firewood as toxic fumes may be emitted during burning.

If you cannot use the product, or you cannot find someone that can use it, safely store it until yours or a nearby community holds a household hazardous waste collection program/event. If the original container is not in good condition, the material should be carefully transferred to a compatible container and labeled with a description of the product, handling and disposal instructions according to the product label and the date when the material was transferred.

## **ALTERNATIVES TO HOUSEHOLD HAZARDOUS WASTES**

There are numerous natural non-hazardous substitutions to the many hazardous products we purchase for the home. For a copy of the free publication, "Alternative to Household Hazardous Wastes" contact the Recycling and Solid Waste Program at the Mississippi Department of Environmental Quality at 601/961-5171 or visit our website at [www.deq.state.ms.us](http://www.deq.state.ms.us).

## **WASTE REDUCTION, RECYCLING AND COMPOSTING**

This publication has been discussing the proper management of household hazardous waste in your home. However, the greatest volume of waste generated at home is nonhazardous solid waste (garbage). In the past, most homeowners have disposed of all their garbage without considering recycling or composting. It was just too easy and cheap to put it in the garbage can, place it at the curb or road and it just went away. Today however, many homeowners have realized there is no more "away" and that their community must get involved in waste management practices that involve more than just landfilling.

Today's homeowners can play a key role in conserving natural and energy resources as well as extending the life of their local landfills by actively participating in waste reduction, recycling and composting programs. In the United States we generate approximately 200 million tons of municipal solid waste each year. This is equal to burying 26,000 football fields 10 feet deep in garbage!! Mississippi produces approximately 3 million tons of garbage annually which is equivalent to 550 football fields 6 feet deep in compacted garbage!! The average person in Mississippi indirectly produces approximately 4 to 5 pounds of garbage per day. This includes residential garbage and yard debris. It also includes commercial and industrial waste generated to produce the products that we purchase. Mississippi has challenged local communities, counties and state government, and the private sector to reduce solid waste so that fewer materials are sent to solid waste landfills in the state.

The first step in initiating a recycling program at home is to contact your local recycling or solid waste department or look in the yellow pages to see what type of recycling facilities are available in your area. Recyclables are handled primarily in three ways: 1) curbside pick-up at your home, 2) delivered to a drop-off site, and/or 3) donated or sold at a recycling center or scrap dealer. Most communities have markets for cardboard, newspapers, and aluminum and steel cans. Other materials being collected and recycled include: plastic containers, glass bottles, used motor oil, phone books, automotive batteries and tires.

A major component of our municipal solid waste stream is yard waste (which makes up approximately 18 to 20% by weight). Homeowners can use grass clippings, leaves and vegetable waste to start a compost pile in their backyard. When properly done, composting is a process that does not create an odor or attract animals or insects. Compost is a useful soil enhancer, and improves water and nutrient holding capacity of most soils.

For more information about composting, you can contact your local county cooperative extension service office, or contact the Recycling and Solid Waste Reduction Program at the Mississippi Department of Environmental Quality at 601/961-5171, or our website [www.deq.state.ms.us](http://www.deq.state.ms.us).

For free brochures and other information on waste reduction, recycling and composting call or write:

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For information on recycling in your area visit the Earth's 911 Website at [www.cleanup.org](http://www.cleanup.org) or call 1/800-CLEANUP.