



Home & Environment

Household Waste Management Hazardous Waste

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Waste management is the collection, processing, and disposal or reuse of recyclable and non-recyclable waste. The percent of waste that is deposited in landfills has decreased dramatically since the 1960s, when more than 90 percent of waste was landfilled.

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Household Hazardous Waste

Everyday products found around your house contain hazardous chemicals—everything from nail polish remover to household electronics to oil for your car. Household hazardous waste (HHW) is not typically regulated by federal, state, or local authorities but should not be discarded with your other trash. HHWs can be dangerous to humans, animals, the environment, and waste treatment systems.

The best way to dispose of HHWs is to use them for their intended use, but if you must dispose of them, use safe options. Many sanitation authorities have permanent collection locations or collection events for HHWs. For example, if you have a small amount of household cleaner left, don't just throw the bottle away; use it completely before opening a new container. Never mix HHWs as they can react in unpredictable ways, causing noxious gasses to form, ignite, or explode. Don't throw your HHW in the trash or pour it down the drain; dispose of it properly in a way that does as little damage as possible.

Latex paint can be left open to dry out or combined with kitty litter until it is solid. Then it can be put out with the trash with the lid off so the hauler knows that the paint is solid. Do not dump paint down the drain. Latex paints can dry and clog the septic system and may kill the beneficial bacteria.

Oil-based paints should be disposed of at a hazardous waste collection site. When washing out paint brushes, make sure to wash them in a sink that leads to a wastewater treatment facility. Oil-based paints, if disposed of improperly, can contaminate the groundwater system. Pouring paint down the drain can cause problems with your septic system and may kill beneficial bacteria.



The 3 Rs are the foundations of waste management. The order is based on the impact each has on waste management.

Landfills are large excavated areas lined with clay or a polyethylene liner that prevents contamination caused by waste in the landfill. Waste is deposited in a landfill, and eventually when full, the landfill is covered with soil or clay.

Paint thinners, solvents, stains and other oil-based paint products are considered hazardous waste and should be taken to a waste collection site if they will not be used. Try safe alternatives to paint strippers, such as water, baby oil, butter or margarine to remove paint from hands; and sandpaper, scrapers, heat guns and water-based strippers to remove paint from surfaces.

You don't have to trash your excess paint. Donate it to a charity or mix leftover paint and use it for projects where color does not matter. (Mix only similar kinds of paint.)

Pesticides in your house can be dangerous to you, your family, and your pets. Try alternative methods to reduce the need for pesticides. Fill in any cracks or holes where pests can get into your house, and keep your house clean to eliminate access to food sources for pests. If you do need to use a pesticide, purchase only the quantity you need, use it according to the instructions on the label, and completely use a container before starting a new one. If you do have extra and have no need for it in the future, give it to a neighbor or contact local charities to see if they will accept opened pesticides. If you must dispose of the pesticide, either take it to a HHW collection facility, or in some instances it is recommended to wrap the pesticide in multiple layers of newspaper or place it in a bin and surround with clay-based kitty litter and dispose of it in the trash; check with your local waste authority for instruction. No matter how you use or dispose of a pesticide, keep the label protected as it provides important information to you and to the collection facility on its use and disposal requirements.

Cleaning supplies are the most common HHWs found in a household. Oven cleaners, floor wax, furniture polish and carpet and upholstery

cleaners all typically have environmentally harmful components. The proper method of disposing of these products is to use them completely for their intended use. If you must dispose of them, share them with a neighbor, contact local charities to see if they will accept opened cleaning supplies, or take them to a HHW collection facility.

Household cleaning supplies don't have to be toxic; alternatives are available at specialty stores and even at your local supermarket or health-food store. You can make your own cleaning supplies using a few basic everyday ingredients that you probably already have. For more information on homemade household cleaners contact your local cooperative extension office or go to www.extension.org/pages/Make_Economical,_Healthy_and_Green_Household_Cleaners.

Antifreeze is a dangerous toxic substance, especially to children and animals. It has a sweet smell and taste, and if ingested in large enough quantities can cause organ failure and death. If you have excess or used antifreeze, take it in a spill-proof, unbreakable plastic container labeled ANTIFREEZE to a service station for recycling. If any is spilled, wipe up with a towel and dispose of the towel in a covered bin.

Motor oil is one of the easiest materials to recycle and yet one of the most widespread pollutants. Used oil is insoluble, persistent, contains heavy metals, and is a major source of pollution in our nation's waterways; it can kill plants and animals and pollute drinking water that is obtained from surface waters and groundwater. Discarded oil from a single oil change—2.5 quarts—can contaminate a million gallons of fresh water—a year's supply for 50 people. If all used oil was recycled, 1.3 million barrels of oil could be saved in the United States every day. Recycled oil

is used to make re-refined oil, which is as good as new oil. One gallon of used oil that is re-refined makes enough oil for a typical oil change; it takes 42 gallons of crude oil to make that same amount. In many states it is illegal to improperly dispose of used motor oil; in Kentucky, improper disposal can carry a fine of up to \$1,000.

Electronics contain hazardous substances that pose a health threat to humans and the environment. For example, the glass picture tubes found in computer monitors and television screens contain between five and eight pounds of lead. Other hazardous materials found in electronics include chromium, cadmium, mercury and nickel. Batteries contain heavy metals and are thus a dangerous waste. About half of all the mercury and one-fourth of all the cadmium used in the United States go into batteries. Yet most batteries are thrown out with the trash and end up in landfills, where they may corrode, break apart and release those metals into the soil.

- **Batteries** that get incinerated with other trash release dangerous vapors into the air. Batteries can be recycled in a number of different ways. Wet-cell batteries, such as car and boat batteries, are often required by state law to be recycled and can be returned to a retailer for disposal. Single-use batteries can be recycled through specialized recyclers or retail store drop-offs. Rechargeable batteries can be recycled through specialized recyclers such as the Rechargeable Battery Recycling Corporation (www.call2recycle.org/), which has drop-off locations in many states.
- **Computer** retailers often accept used computers to be recycled for free or a nominal fee. You can also contact your local recycling authority for instruction, as they often have

events or facilities for collecting computers and electronics. Before you dispose of a computer, format your hard drives to help prevent identity theft.

- **Cell phones** and accessories are made from precious metals, copper, plastics, and other valuable resources. Extracting and manufacturing these valuable resources requires energy. By recycling cell phones, valuable materials are kept out of landfills, and energy and other natural resources are conserved. Cell phones are accepted through the Rechargeable Battery Recycling Corporation (www.call2recycle.org/) and as part of the eCycling program through the EPA. Many cell phone retailers accept phones and accessories at their retail stores.

Pharmaceuticals are becoming so much of a problem when it comes to water pollution that they are being found in some drinking water supplies. Throwing medicines out with the trash can cause problems if children or pets gain access to them. The best way to dispose of unwanted medicines is to return them to your pharmacist; many pharmacies will accept expired and unwanted medicines and dispose of them for free. If your pharmacy will not accept them, take your pharmaceuticals to a HHW collection site and dispose of them there. For more information on proper disposal of pharmaceuticals visit www.smarxtdisposal.net/.

Compact fluorescent light bulbs, or CFLs, are a HHW that people typically do not recognize as an environmental contaminant. CFLs are not like incandescent light bulbs; although they help save energy and last longer, they should not be landfilled. CFLs contain mercury, a toxic substance that can cause neurological damage; however, as long as CFLs are not broken they are safe and will not release mercury.

If you need to dispose of a product, do it correctly. Do not litter, burn, or dump waste illegally. Waste collection and recycling programs are found in many counties and where they are not, legal dumps are available.

Safe cleanup instructions for broken CFLs can be found on the ENERGYS-TAR website at www.energystar.gov/ia/partners/promotions/change_light_downloads/Fact_Sheet_Mercury.pdf. Mercury is not only harmful to humans but can contaminate entire ecosystems. Properly disposing of CFLs can prevent mercury from being released into soil and groundwater. To find a location to recycle your CFLs, contact your county solid waste coordinator or waste hauler, or go to <http://earth911.com/> and search for "CFL" near your zip code.

Resources

Every county in Kentucky has a solid waste coordinator. If you have any questions or concerns regarding how to dispose of any item that may or may not be hazardous, contact your local solid waste coordinator or the Division of Waste Management. Their responsibility is to deal with issues in recycling, composting, landfill and disposal, household hazardous waste, litter abatement, illegal dumping, enforcement of solid waste laws, education, and community outreach.

Kentucky Division of Waste Management: (502) 564-6716

Kentucky Solid Waste Coordinators:
<http://waste.ky.gov/RLA/Documents/SWC%207-23-10.pdf>

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