

**HHW
HOUSEHOLD
HAZARDOUS WASTE
Resource Guide**

Developed and Updated By:



The Joint Solid Waste
Management District of
Defiance, Fulton, Paulding and
Williams Counties.

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Household Hazardous Waste (HHW)

Or 'home generated special materials', is post-consumer waste which qualifies as hazardous waste when discarded. HHW is not regulated by the EPA.

- It includes household chemicals and other substances for which the owner no longer has a use, such as consumer products sold for personal care, household cleaners and detergents, automotive care, pest control, animal care, light bulbs, batteries and other purposes.
- EPA considers some leftover household products that can catch fire, react, or explode under certain circumstances, or that are corrosive or toxic as household hazardous waste. Products, such as paints, cleaners, oils, batteries, and pesticides can contain hazardous ingredients and require special care when you dispose of them.



Contact Information:

The Joint Solid Waste Management District of Defiance, Fulton, Paulding and Williams Counties will assist with any recycling or safe disposal need. Please contact each county office for detailed information per county program.

Defiance County E & A	419-782-5442
Fulton County Utilities	419-337-9263
Paulding County WMEA	419-399-3630
Williams County Health	419-485-3141

District Website: www.4CSWD.com



Safe Management of HHW

To avoid the potential risks associated with household hazardous wastes, it is important that people always monitor the use, storage, and disposal of products with potentially hazardous substances in their homes. Some quick tips for the safe handling of household hazardous wastes include:

- Follow any instructions for use and storage provided on product labels carefully to prevent any accidents at home.
- Be sure to read product labels for disposal directions to reduce the risk of products exploding, igniting, leaking, mixing with other chemicals, or posing other hazards on the way to a disposal facility.
- Never store hazardous products in food containers; keep them in their original containers and never remove labels. Corroding containers, however, require special handling. Call your local hazardous materials official or fire department for instructions.

Safe Management of HHW

- When leftovers remain, **never mix HHW** with other products. Incompatible products might react, ignite, or explode, and contaminated HHW might become unrecyclable.
- Check with your local environmental, health or solid waste agency for more information on HHW management options in your area.
- If your community has neither a permanent collection site nor a special collection day, you might be able to drop off certain products at local businesses for recycling or proper disposal. Some local garages, for example, may accept used motor oil for recycling. Check around.
- Remember, even empty containers could pose a hazard.
- Read all labels, follow directions for safe handling and disposal information

Safe Disposal:

WEED KILLER: {ex. Round Up, Spectricide, Ortho} contains chemicals and should be use in its entirety.

BE SAFE—READ THE LABELS—Follow the Directions —Use the Entire Contents—Wear Personal Protective Gear Such as Gloves, Ear Plugs, Goggles, Shields— Recognize Safety Symbols



Safe Disposal:

STAINLESS STEEL CLEANERS:

May contain mild toxic chemicals. Liquids may be diluted and disposed down a drain.

STOVE CLEANERS: Stainless tops, glass tops, removable burners for the outside of the stove may require different types of cleaners that may contain chemicals. Oven cleaners such as Formula 409 and Easy Off usually have a caustic type of soda and other powerful degreasers and chemicals. Use as directed.

TELEVISIONS: The so-called CRT or cathode ray tube TVs contain hazardous waste such as lead and mercury, and not just a touch of lead - up to 8 pounds of material. Some electronic events will accept TV's, but normally they will charge a fee to do so and this is due to the labor and regulations required to safely remove the lead and mercury. Newer TVs with Liquid Crystal Displays (LCD) or Plasma displays are not hazardous and can be taken to electronics events accepting or take to a land-fill.

Safe Disposal:

ACIDS - Common strong acids include hydrochloric acid, sulfuric acid, phosphoric acid, and nitric acid. Common weak acids include acetic acid, boric acid, hydrofluoric acid, oxalic acid, citric acid, and carbonic acid. Top 10 Household Acids are:

Acetic Acid is found in vinegar. This weak acid is most often found in liquid form.

Boric Acid may be used as a disinfectant or pesticide. It's usually found as a white crystalline powder. Borax is a familiar related compound.

Carbonic Acid is a weak acid.

Citric Acid is a weak organic acid that gets its name because it is a natural acid in citrus fruits. The chemical is an intermediate species in the citric acid cycle, which is key for aerobic metabolism. The acid is widely used as a flavoring and acidifier in food. Pure citric acid has a tangy, tart flavor.

Safe Disposal: Acids Continued

Oxalic Acid is abundant in green, leafy foods. It's also found in metal cleaners, anti-rust products, and some types of bleach. Oxalic acid is a weak acid.

Sulfuric Acid is a corrosive mineral strong acid. Although normally clear to slightly yellow, it may be dyed dark brown to alert people to its composition. Sulfuric acid causes serious chemical burns, as well as thermal burns from the exothermic dehydration reaction. The acid is used in lead batteries, drain cleaners, and chemical synthesis.

Hydrochloric Acid is a clear, highly corrosive strong acid. It's found in diluted form as muriatic acid.

Hydrofluoric Acid is a highly corrosive strong acid which can dissolve glass and metals, so is stored in plastic containers. If spilled on skin, hydrofluoric acid passes through soft tissue and could attack bones.

Safe Disposal:

PRESCRIPTION MEDICINES: A prescription drug is a pharmaceutical drug that legally requires a medical prescription to be dispensed. There are several laws and statutes dealing with any type of sharing prescription drugs. Federal Law prohibits anyone from using or possessing someone else's prescription drugs. Check with your local Sheriff's Office for information on your county Drug Take Back Program.

PROPANE TANKS: Do not empty a propane tank by letting the gas escape via the valve. Propane venting can cause an area to become flammable. Propane is heavier than air. Return the empty container at places that sell propane or exchange tanks.

RODENTICIDES: Poisons to kill rodents mice, squirrels, woodchucks, chipmunks, porcupines, nutria, beavers, and voles. Read and adhering to the directions on the product label.

Safe Disposal:

PAINT SOLVENTS: {ex. Turpentine, strippers, thinners or mineral spirits}. Contains chemicals, follow directions for safe use and disposal. Solidify the liquid with an absorbent such as kitty litter or sand. Once an almost slurry type or solid, it can be safely thrown into the trash.

PESTICIDES: Pesticides are poisonous chemicals used to control weeds and insects that may pose a threat to a plant or crop. Pesticides include insecticides, fungicides, weed control and rodent poisons. Pesticides are not recyclable, use the entire content as directed. Menards, Lowes and Home Depot.

POOL CHEMICALS: Pool chemicals should be stored in a cool, dry area. Moisture and heat are both elements that can trigger a bad reaction including fires and toxic fumes. Read the labels and follow disposal directions. Donate unused chemicals to other pool owners

Safe Disposal: Acids Continued

Nitric Acid is a strong mineral acid. In pure form, it is a colorless liquid. Over time, it develops a yellow color from decomposition into nitrogen oxides and water. Nitric acid is used to make explosives and inks and as a strong oxidizer for industrial and lab use

Phosphoric Acid is a mineral acid used in home cleaning products, as a chemical reagent, as a rust inhibitor, and as a dental etchant. It is a strong acid.



Corrosive



Safe Disposal:

ADHESIVES: Loctite, Gorilla Glue, Super Glue are a few examples. The less toxic choices could include white glue such as Elmer's School Glue or Glue Sticks and Paste. Small amounts can be opened to dry and hardened. Large amounts can be spread in layers on paper or newspapers and thrown away.

AEROSOL CANS: Drain the can by turning them upside down and spraying until gone. Empty cans can be discarded into the trash. The less toxic choice is to purchase non-aerosol containers.

AIR FRESHENERS: Chemicals are added to sustain the fragrance longer, possibly toxic. Read labels, look for natural fresheners without chemicals. Most containers for scents: clips, oils, plug ins, are not recyclable and can be thrown away.

ALUMINUM CANS: Rinse and recycle. Foil and trays are not recyclable in our District.

Safe Disposal:

MEDICATIONS: You can dispose of your unwanted, expired or unused medicines [over the counter or prescribed] through a drug take back program offered by local Sheriff Offices. Or mix the pill in an unappealing substance such as used kitty litter, rotted food or coffee grounds and throw into the trash.

MOTHBALLS: Contain chemicals and are poisonous. These are not recyclable and will weaken with age. Use gloves and place loose or boxed balls into a sealed container and throw in the trash.

OIL BASED PAINT: {ex. Enamels, varnishes, shellacs, lacquers, stains and sealers}, The vapors can be noxious. If minimal amount, open lid and have it naturally dry solid or kitty litter or sand in the container to create a slurry. It then can be mixed within your bagged trash to be disposed.

Safe Disposal:

LIGHTER FLUIDS: For grills or Butane lighters, use all lighter fluids as directed and follow disposal recommendations on container.

LUBRICANTS AND OILS: This can include crankcase oils, motor oils, hydraulic and gear lubricants, transmission and power steering fluids and most mechanical lubes, grease and oils. Be sure to drain into a pan or a container, not in the garage or a yard. Do not mix lubricants or oils with other fluids. Many mechanics or automotive repair shops will accept lubricants and oils to burn for fuel.

MERCURY: Household Mercury items should be sealed in a glass container with lid taped and then placed into a zip lock bag. Bag should be stored in a cool protected area to prevent leakage, breakage and evaporation. Williams County and Defiance County will accept small amounts of household Mercury.

Safe Disposal:

ANIMAL SUPPLIES: Flea collars contain insecticides and toxicity decreases over time. These can be thrown away in your trash. Any liquid type of product such as flea shampoo, may be diluted and flushed if NOT using a septic system. Consider giving excess to the humane society.

ANTIFREEZE: Is toxic material and should not be discarded into the trash. Check with local mechanics that may burn the mechanical fluids for heat.

APPLIANCES: Freon is a toxic gas in older refrigerators and freezers. Most metal recyclers will accept appliances if the Freon has been removed and possibly pay you for it.

ART SUPPLIES: Silica dust glazes, formaldehyde, solvents, brushes, paint cleaner, oils, etc. Read the labels for individual product disposal options.

Safe Disposal:

ASBESTOS: This can be a hazard when disturbed and fibers are inhaled. Normally found as insulation wraps, roofing material, floor tiles, etc. used in 1940 thru 1970's. If doing home repairs or remodel dated within this timeframe, call a professional to test and determine if asbestos is a problem.

ASPHALT ROOF TILES: May contain an adhesive, tar residue, or non-friable asbestos. Unless known for friable asbestos, this can be disposed of safely at a



landfill.

Safe Disposal:

LIGHT BULBS CONTINUED:

INCANDESCENT BULBS: Are being phased out and replaced by LED bulbs. These do not contain anything hazardous and can be thrown away.

LED (Light Emitting Diode) use less energy and do not contain any mercury. These can be thrown away in the trash.



Safe Disposal:

LIGHT BULBS:

CFL's COMPACT FLUROESCENT LIGHT BULBS/CURLY LIGHT BULBS:

BULBS: Also contain a small amount of mercury and argon. The amounts are minimal and can be placed in a sealed bag and thrown in the trash. NW Electric in Bryan, OH will accept CFL's from households and check with your county recycling program.

FLUORESCENT LIGHTS: Fluorescent contains mercury making them a hazardous material. Households only may recycle the long tube lights at Menards. Call first for quantity accepted. Businesses and industries will need to go online to locate a fluorescent light recycler and there is a charge to process them.

HALOGEN BULBS: Contains a small amount of halogen, but can be thrown in trash.

Safe Disposal:

BATTERIES: Are normally classified as primary or secondary forms.

Primary batteries are designed to be used until exhausted of energy then discarded.

Secondary batteries can be recharged and used multiple times.

Automotive or Car Battery: Normally contains lead acid and is rechargeable. These batteries can be brought to most mechanic or auto shops to be recycled and many business offer incentives for returned batteries.

Alkaline Batteries: Are the most common disposable battery. Small dry cell, sealed and non-rechargeable. AA, AAA, C, D and 9 volt.

Backup Batteries: Rechargeable backup batteries are kept charged by the prime power supply and are used for security systems, hospitals, lighting, exit signs, alarm clocks, etc.

Safe Disposal:

BATTERIES CONTINUED:

Battery Packs: More than one battery connected. May vary in size and voltage and are found in radio control toys and electric toy vehicles.

Button Cell or Coin Battery: Small single cell shaped as a squat cylinder or button. Used in {ex. watches, hearing aids, calculators} and mainly disposable.

Dry Cell: Is a type of electric battery, commonly used for portable electrical devices.

Lithium or Lithium Metal: A primary battery that have metallic lithium as an anode. It is disposal, small sealed and not rechargeable. Used in watches, cameras, handheld electronics, pacemakers and remote car locks.

Lithium-Ion Batteries: Are rechargeable and commonly used in cell phones, laptops, power tools, etc. Lowe's and Menards will accept rechargeable batteries

Safe Disposal:

KEROSENE: Should only be used as intended and directed. Never pour it down a drain or place in the trash. Minimal amounts could be left to evaporate and/or placed in kitty litter or similar absorbent.

LATEX PAINT: Is NOT hazardous and can safely be thrown away, however liquids are not accepted at Landfills and the paint should be solidified with kitty litter , sand or some type of absorbent.

LAUNDRY CLEANERS: Detergents {ex. Tide, Gain, ERA}, Fabric Softeners {ex. Downey, Bounce, Snuggle}, Pre-Soaks {ex. Oxi, Borax}, Stain Removers {ex. Shout, Clorox, Spray and Wash} come in liquid form, pods, powder, gel and sheets. All can be thrown in the trash. Plastic containers may be recycled after being rinsed.

LEAD PAINT: Lead in paint was banned in 1978. Disposal is considered hazardous and should be handled by a professional.

Safe Disposal:

GLASS/WINDOW CLEANERS: May contain alcohol, bleach or a mild chemical. Contents can be diluted in the drain or pour down the toilet.

HOUSEHOLD CLEANERS: Most household cleaners are water-soluble and are not hazardous. They may come in a paste, aerosol, non-aerosol, pod, powder, gel or a liquid. Most can be diluted and poured down a drain or thrown away in the trash.

HERBICIDES: Herbicides control specific weed species. Use the entire content as directed.

INSECTICIDES: Insecticides are poisonous chemicals specifically intended to kill insects. Use the entire content as directed.

INK CARTRIDGES: Most manufacturers will provide a return box to submit the cartridge to be recycled. Many big retailers such as Office Depot, Office Max and Best Buy will accept cartridges.

Safe Disposal:

BATTERIES CONTINUED:

Nickel Cadmium (NiCad) Batteries:

Are rechargeable and commonly used in electronics and medical equipment. Cadmium is a toxic heavy metal and should not be incinerated or it will produce toxic vapors.

UPS—Uninterruptable Power Supply:

It provides protection from power interruptions and failures by supplying energy within stored batteries

Wet Cell Battery: Has a liquid electrolyte, common in car batteries but being replaced with gel cells.

Zinc—Carbon Battery: Is a dry cell primary battery used in devices such as remote controls, flashlights, clocks or transistor radios.

Lowes, Menards, Home Depot and other businesses will accept rechargeable batteries to be recycled. Call your local recycling resource for options to dispose or recycle batteries.

Safe Disposal:

BLEACH: Chlorine comes in a liquid, powder, or a pod. 2 gallons or less can be diluted and emptied into the drain or toilet. Triple rinse the container and take to local recycler.

BRAKE FLUIDS: Pour old or unused brake fluids into a container of cat litter. It will be absorbed and can be thrown in the trash.

BUG REPELLENT: Products may be in aerosol cans, non-aerosol sprays, pump bottles, wipes, clips, bracelets, torches and candles. Use per directions. Products normally decrease in potency as it is exposed to elements. Most can be safely thrown away.

CAR WAX & POLISH: Read the labels is it flammable or toxic? If it does not contain chemicals, it can be diluted and placed down a drain or toilet. If it does contain chemicals, place into kitty litter to be absorbed and then throw it into trash.

Safe Disposal:

FERTILIZERS: Come in a dry or liquid form, natural and synthetic, may contain pesticides or may not. Fertilizers are widely used to aid plant growth and increase crop production. If it does not contain any pesticides it can be safely thrown in the trash. If it does, find a use for it, your garden, the neighbor's garden a field. Use the product as intended and use all of it.

FURNITURE POLISH: May be an aerosol, non-aerosol, a paste or a wipe. It usually does not contain any chemicals and can be thrown in the trash.

GASOLINE: Is flammable and toxic. It should not be used as a solvent, cleaner, BBQ started or any non-engine use. Do not pour down a drain or toilet or place in the trash. It is a safety hazard to humans and the environment if used improperly. Use all of the container as directed.

Safe Disposal:

ELECTRONICS OR E-WASTE: The development of new technology leaves behind outdated devices, but the majority can be recycled. The items listed below is considered e-waste.

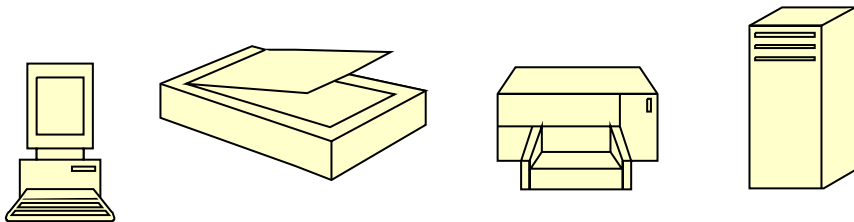
Computer Components Include: CPUs (tower), Monitors (Tube and Flat), Key Board, Mouse, Speakers, Internal Drives.

Laptops, Tablets, E-Readers, GPS Units

Cell Phones

Peripherals Include: Printers (Dot Matrix, High Speed, Laser) Scanners, Fax Machines, Copiers, Plotters.

Please check with the District to determine where and what e-waste can be recycled within your county.



Safe Disposal:

CARPET CLEANERS: Most liquid, gel and powder water-soluble products can be disposed of in the drain or toilet.

CARPET DEODORIZERS: Most liquid, gel and powder water-soluble products can be disposed of down the drain or toilet.

DISH SOAP: {ex. Dawn, Joy, Ivory} are water soluble and can be disposed of in the drain or toilet.

DISHWASHER SOAP AND RINSE AGENTS: {ex, Cascade & Finish} are water soluble and can be disposed down the drain or toilet.

DISINFECTANTS: {ex, Lysol, Clorox, Hand Sanitizer} Read label, but most are water soluble and can be disposed down the drain or toilet.

DRAIN UNCLOG & CLEANERS: These contain a mild chemical but can safely be emptied into a drain.