



A Guide for Hazardous Waste Generators

How to Identify, Store, and Dispose of Hazardous Waste in Kentucky

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Using this Guide

Kentucky's Division of Compliance Assistance (DCA) developed this guide to help business owners learn about and comply with hazardous waste laws that may apply to them. It is intended as general guidance in that it provides an overview of hazardous waste, hazardous waste regulations, and management responsibilities. Although the guide does not provide a complete description of all the regulatory requirements, it does cover the basic responsibilities of businesses that generate hazardous waste. It also provides a starting point for who to contact and where to get more information about complying with state and federal regulations. Further questions about the topics in this guide should be directed to the Kentucky Division of Waste Management's Hazardous Waste Branch at (502) 564-6716. For reference, federal hazardous waste regulations are located in Title 40 of the Code of Federal Regulations (CFR), Parts 260 and 299. Federal regulations can be viewed at <u>www.ecfr.gov</u>. Kentucky's state hazardous waste regulations adopt the majority of federal regulations. In 2018, Kentucky's rules for hazardous waste were condensed into five regulations located in 401 KAR Chapter 39. State regulations can be viewed at the following link: <u>https://legislature.ky.gov/Law/kar/Pages/default.aspx</u>.

This document is not intended and cannot be relied upon to create any rights, substantive or procedural, enforceable by any party in litigation with Kentucky. The Department reserves the right to act at variance with this guidance and to change it at any time.

What is Hazardous Waste?

The United States Environmental Protection Agency (EPA) defines hazardous waste as "waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment". As a subset of solid waste (meaning a solid, semi-solid, liquid or contained gaseous material that is discarded), hazardous waste has stricter handling requirements because of it's potential danger. To be considered as hazardous, the waste material must match one of 400 listed materials or must have one of four characteristics. The four characteristics include materials that catch fire, react to other substances, have corrosive properties, or are toxic. As such, hazardous waste is identified as one of two types: *listed* or *characteristic*. Further details regarding types of hazardous wastes are outlined on page 15.

Who Regulates Hazardous Waste?

Along with EPA, state environmental agencies regulate hazardous waste in order to ensure that it is dealt with in a safe manner. Without regulations and safety measures, those who are involved in managing hazardous waste could be harmed. Individuals who manage hazardous waste include anyone who generates, transports, treats, stores and/or disposes of waste that has been categorized as hazardous by EPA.

Although regulations for managing hazardous waste have been around for many years, the EPA has made wideranging revisions in recent years in order to make the rules easier to understand. In 2016, EPA passed the Hazardous Waste Generators Improvements Rule. Among other changes, this final rule revised standards for hazardous waste determinations. Likewise, states were required to adopt some of the revised standards because previous regulations were less stringent. More information on the final rule can be found at: <u>https://</u> <u>www.epa.gov/hwgenerators/final-rule-hazardous-waste-</u> generator-improvements.

Common Acronyms

CERCLA	Comprehensive Environmental Response
	Compensation & Liability Act (Superfund)
DOT	Department of Transportation
EPA	Environmental Protection Agency (federal)
ERT	Emergency Response Team
KAR	Kentucky Administrative Regulation
LDR	Land Disposal Restrictions
LQG	Large Quantity Generator
POTW	Publicly Owned Treatment Works
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization A
SQG	Small Quantity Generator
TCLP	Toxicity Characteristic Leaching Procedure
TSDF	Treatment, Storage, or Disposal Facility

VSQG Very Small Quantity Generator

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What is a hazardous waste generator?

The term "generator" applies to any individual or business that creates hazardous waste. There are three categories of hazardous waste generators based on the quantity of waste generated per month:

1) Very Small Quantity Generators (VSQGs)

VSQGs generate less than 100 kilograms (kg) of 220 pounds (lbs) of hazardous waste per month and less than 1 kg (2.2 lbs) of acute hazardous waste per month.

2) Small Quantity Generators (SQGs)

SQGs generate between 100 and 1,000 kg (220 and 2,220 lbs) of hazardous waste per month.

3) Large Quantity Generators (LQGs)

LGQs generate more than 1,000 kg (2,200 lbs) of hazardous waste per month or more than 1 kg (2.2 lbs) of acute hazardous waste per month.

Acute Hazardous Waste

Some wastes are considered to be "acutely hazardous". These are wastes that EPA has determined to be so dangerous in small amounts that they are regulated the same way as large amounts of other hazardous wastes. The following wastes are considered acutely hazardous: all "P" listed wastes; F020, F021, F022, F023, F026 and F027. If your company generates more than one kilogram (approx. 2.2 pounds) of acutely hazardous waste in a calendar month, then you are subject to all regulations for LQGs.

Generator Status

The amount and type of waste generated in a given calendar month determines "generator status".



Each category of generator is subject to hazardous waste rules that are specific to that category. Many businesses generate hazardous waste, even if only in small amounts. Therefore, it is imperative that business owners know how to determine if they generate hazardous waste and how much is generated per month in order to determine the requirements that apply to their business. In addition to complying with hazardous waste regulations, business owners are also responsible for making sure that their employees comply with the law. For any business, liability for waste generated on site continues from the point of generation to the point of final destination. It is always in the best interest of the business owner to be thoroughly knowledgeable about regulations, as well as the transporters and facilities that handle the waste once it leaves the business' location.

What are the Steps to Determining Generator Category?

Depending on the generator category, any business that creates enough hazardous waste to fall into the SQG or LQG category must register with the Kentucky Division of Waste Management and obtain an EPA ID number. In order to determine the generator category, the type and amount of waste must be identified first. The steps for determining generator category are outlined below:

1) Identify the Waste Stream

The first step involves identifying the waste stream (s) generated at the site. A waste stream is any one type of waste generated by a company. It is possible to have two waste streams that are generated by completely different processes and/ or located in different areas. In order to properly identify the waste stream, it is important to know some of the definitions used by federal and state agencies. A **waste**, for example, is any solid, liquid, or contained gaseous material that is disposed of, burned, incinerated, or recycled (is it a waste if it's recycled). Waste can be a byproduct of a manufacturing process or a commercial product used by the business.

2) Analyze and Characterize Waste Composition (Conduct a Waste Determination)

The second step is to analyze the composition of the waste stream(s) and determine if the chemical and physical components are listed as hazardous or exhibit hazardous waste characteristics. This process is called conducting a waste determination. Characteristic wastes include materials that are ignitable, corrosive, reactive and/or toxic. As such, handling and disposing these materials requires certain protocols and safety attire. Flammable materials, for example, must not come into contact with anything that could catch fire. While corrosive substance may have contact with other materials, they cannot transfer to a container that the liquid would eat through. Reactive materials need placement away from other substances because it would cause a physical reaction such as noxious fumes. Toxic wastes could cause injury if it comes into contact with skin or is ingested in some form. Any lack of safety protocols or adherence to regulations could cause noncompliance for which the business owner becomes liable.

To help identify common waste streams that may have listed or characteristic hazardous wastes, please refer to the table on page 15.

How Do You Determine if a Waste is Listed or Characteristic?

Listed Hazardous

Any waste materials that are specifically listed in Kentucky's hazardous waste management regulations are automatically characterized as hazardous. <u>Kentucky's list of hazardous wastes</u>, found in <u>401 KAR 39:060</u>, incorporate the federal lists of more than 500 wastes. These wastes are identified using a four-character code of one letter and three numbers. The <u>federal list of hazardous</u> <u>waste</u> is found in <u>40 CFR Part 261</u>.

Characteristic Hazardous

If any of the waste does not appear on the hazardous waste list, then it still might be considered hazardous if it exhibits certain characteristics (see below) as identified in state regulations.

Flammable

Examples of materials that are flammable or ignitable under certain conditions include paints, solvents, and degreasers.

Reactive

Reactive wastes can be unstable, explosive, or capable of producing noxious fumes when mixed with water or under certain conditions such as heat

or pressure. Examples of reactive wastes include certain cyanides or sulfide-bearing wastes.

Corrosive

Materials that corrode metals or have extreme high or low pH are known as corrosive. Examples include battery acid, rust removers, and acid or alkaline cleaning fluids.

Τοχίς

Toxic wastes are harmful or fatal when ingested, absorbed, or able to leach toxic chemicals into the ground. Examples include wastes with high concentrations of heavy metals such as cadmium, lead, and mercury.

Generator Responsibility and the Toxic Characteristic Leaching Procedure (TCLP Test)

As the generator of the waste, a business owner may declare their waste hazardous based on process knowledge or use historical waste determination. If there is any uncertainty as to the composition of the waste, then it is best to have a qualified laboratory perform a hazardous waste test.

Toxic wastes can be determined by using the Toxicity Characteristic Leaching Procedure (TCLP). A TCLP involves a chemical analysis process used to determine whether there are hazardous elements in a waste.

Determining Generator Category

3) Measure Hazardous Waste Amounts

The third step requires measuring the amount of hazardous waste produced each month. There are, however, certain hazardous wastes that do not count toward generator category. The lists below summarize the hazardous wastes that do and don't count toward the monthly total.

Do count the following:

- Hazardous waste accumulated on the property for any period of time.
- Hazardous waste that is packaged or transported off site.
- Hazardous waste that is treated or disposed on site as regulated by permit.
- Hazardous waste that is generated as still bottoms or sludges and removed from product storage tanks.

Do not count the following:

- Hazardous waste that is specifically exempted.
- Hazardous waste left in the bottom of a container after pouring or pumping – applies only non-acute hazardous waste.
- Hazardous waste left as residue in the bottoms of tanks while storing products.

- Hazardous waste reclaimed continually on site without storing, such as dry cleaning solvents.
- Hazardous wastes that are managed in an elementary neutralization unit, a totally enclosed treatment unit, or a wastewater treatment unit.
- Hazardous wastes that are discharged directly in a permitted publicly owned treatment works (POTW) without being stored or accumulated first.
- Hazardous wastes that have already been counted once in a calendar month that are treated or reclaimed and used again.
- Hazardous wastes that meet the requirements for being managed under less burdensome regulations. For example: scrap metal that is recycled; unused commercial chemical products or unwanted materials from an academic laboratory; hazardous waste managed as part of an episodic event; pharmaceuticals being managed by healthcare facilities and reverse distributors; and universal wastes and used oil.

Tips for Determining Generator Status

TYPE OF WASTE: To determine type of waste, check the product label and Safety Data Sheet (SDS). All products containing hazardous waste materials have an SDS. It is important to note that some listed wastes are identified as acute hazardous wastes.

TESTING METHODS: Laboratory testing may be necessary to determine if a waste is hazardous. A qualified laboratory must use certain procedures and equipment as identified in hazardous waste regulations.

AMOUNT OF WASTE: To determine the amount of waste, make certain to count all hazardous wastes unless otherwise exempted. Contact the DWM if uncertain if a material or product is exempted, considered universal waste, or qualifies under an episodic event for less stringent management requirements.

CONVERTING LIQUID HAZARDOUS WASTE: Some hazardous wastes are liquids and are measured in gallons. These wastes must be converted to pounds using the liquid's density. The density of water, for example, is 8.34 lb/gal. At this density, 26.33 gallons would weigh roughly 220 lbs and 263 gallons would weigh approximately 2,200 lbs. The density and

weight of any hazardous materials can often be found in the product's Safety Data Sheet.

Episodic Events

EPIISODIC GENERATION EVENTS: Sometimes an incident can change a hazardous waste generator's category for a short period of time. These incidents are considered by EPA to be "episodic events". Provisions for episodic events were

made under the Hazardous Waste Generators Improvements Rule in 2016.



Episodic events can happen as a result of a planned cleanout, small project, unplanned recall, or even a spill. If this happens, the generator may be eligible for a streamlined set of requirements to keep the smaller generators from having to comply with more extensive regulations. It is important to note that not every incident will qualify as an episodic event.

In the event of an infrequent increase in generating waste, contact <u>DWM for regulatory guidance on episodic events</u>.

Kentucky Division of Waste Management Hazardous Waste Branch

502-564-6716

Basic Requirements

Very small quantity generators (no more than 220 Ibs of hazardous waste per month or 2.2 Ibs of acute hazardous waste per month) are not subject to all of the requirements of small and large quantity generators. In order to be in compliance, VSQGs must meet three basic requirements:

- 1) Identify all hazardous waste generated at the facility or business.
- 2) Store no more than 2,200 lbs of hazardous waste on site at any time.
- Ensure hazardous waste is taken to an off-site treatment or disposal facility that is one of the following:

*A state or federally regulated hazardous waste treatment, storage, or disposal facility (TSDF).

*A permitted, licensed, or registered state facility that manages municipal or industrial or solid waste.

*A facility that uses, reuses, or recycles the waste (or treats the waste prior to these activities).

*A universal waste handler or destination facility subject to federal and state universal waste requirements.

*A large quantity generator (LQG) under the same control as the VSQG.

Potential for Waste Consolidation

Under the Hazardous Waste Generator's Improvements Rule, VSQGs can consolidate hazardous wastes with LQGs under the same ownership. Consolidation of VSQGs and LQGs can reduce costs and liability for a company that generates both categories. To begin consolidating, the LQG must notify the DWM and complete the EPA Site ID form at least 30 days prior to the first shipment of its VSQG. All the VSQG needs to do is mark its containers with the words "Hazardous Waste", indicate the hazards of the content, and accumulate no more than the 220 pound limit (and 2.2 pound limit of acute hazardous waste) per month. The LQG manages the VSQG waste along with its own hazardous waste following the LQGs management standards. There are no specific hazardous waste storage requirements for VSQGs, however, it is best practice to label containers, indicate a start date, and otherwise comply with general hazardous waste management requirements.

Even though VSQGs are not legally required to use a manifest or obtain an EPA hazardous waste identification number, many hazardous waste haulers will not transport hazardous waste from a facility without a manifest or identification number. As such, if a VSQG uses a waste hauler or receiver that requires an EPA ID, then it will be necessary to register with DWIM and pay the fee to obtain the required ID number. In addition, a VSQG must register and obtain an EPA ID# to have an episodic event.

Basic Requirements

Small quantity generators (between 220 lbs and 2,200 lbs of hazardous waste generated per month) are required to obtain a federal EPA identification number and a state Certification of Registration with DWM. The EPA ID number and the Certificate of Registration are site specific, identify the company and address, and list the waste streams and hazardous wastes that are generated at the site. State and federal agencies use the 12character numbers to monitor and track hazardous waste activities. In addition to registration, SQGs must submit a <u>Hazardous Waste Annual Report and</u> <u>Assessment Return</u> by March 1 each year.

Obtaining an EPA Identification Number

To obtain an EPA identification number and a DWM registration certificate, SQGs must contact the state hazardous waste management program (Hazardous Waste Branch). There are two forms that must be submitted to DWM: EPA form 8700-12 and DWM7037A. Both forms require identification of hazardous waste by EPA Hazardous Waste Code and must be completed and submitted along with the fee in order for it to be considered a complete registration/notification. Both forms, along with instructions, are available at: <u>https://eec.ky.gov/Environmental-Protection/Waste/hazardous-</u>

waste/Pages/hazardous-waste-forms.aspx. For a list of EPA Hazardous Waste Codes, which must be identified for each site, visit <u>https://www.epa.gov/ hw/defining-hazardous-waste-listed-characteristicand-mixed-radiological-wastes</u>. For information regarding registration fees, view the fee schedule at: <u>https://eec.ky.gov/EnvironmentalProtection/</u> <u>Waste/hazardous-waste/HW%20Forms/</u> <u>Registration%20Fee%20Schedule.pdf</u>.

Note: Registration supersedes all Notification of Hazardous Waste Activity forms previously submitted by a company. If the company has several locations, then an EPA Identification number will be required for each location. Beginning in 2021, SQGs must re-notify every four years using the same form.

Managing Hazardous Waste On Site

Most businesses accumulate some amount of hazardous waste on site for a short period of time before sending it to a TSDF. Before shipping the waste for treatment, disposal, or recycling, it must be managed properly. As outlined below, proper management includes safe storage, accurate labeling, adequate treatment, accident prevention, and emergency response plans.

Accumulating Hazardous Waste and Safe Storage

SQGs can accumulate no more than 13,228 lbs (6,000 kg) of hazardous waste on site for up to 180 days without a permit.

Summary of Requirements for Small Quantity Generators - SQGs

This amount can also be accumulated for up to 270 transferred to the central accumulation area within days if it is to be transported more than 200 miles away for recovery, treatment, or disposal. Exceeding these limits requires the facility to obtain waste. an operating permit as a TSDF. SQGs can, however, store small amounts of hazardous waste in satellite accumulation areas throughout the facility as long as it is labeled "Hazardous Waste". The satellite areas are limited to 55 gallons until this volume is exceeded at which time the waste must be

Safe Storage for Containers

- Label as "Hazardous Waste". ٠
- Provide date the waste was generated.
- Note the hazards of the content of the container (ignitable, corrosive, reactive, toxic).
- Use a container lined with or made of a material • compatible with the waste.
- Keep containers closed during storage.
- Do not open, handle, or store containers is a way that might cause them to leak or rupture.
- Inspect storage containers weekly to look for leaks • and deterioration.
- Keep containers in good condition to make sure containment is compliant with EPA regulations.
- Take precautions to avoid mixing incompatible wastes.

three calendar days. It is important to note that smaller quantity limits apply to acute hazardous

Because of the potential threat to human health and the environment, SQGs must take certain precautions while storing accumulated hazardous waste. Containers and storage tanks for accumulated hazardous waste must be managed according to EPA requirements.

Safe Storage for Tanks

- Label as "Hazardous Waste".
- Label start date when waste was generated.
- Note the hazards of the content of the container • (ignitable, corrosive, reactive, toxic).
- Do not store any materials that will make the tank or • liner rupture, leak, corrode, or fail.
- Equip tanks with automatic waste feed with a cutoff • system, or a bypass system in case of a leak or overflow.
- Inspect discharge control and monitoring equipment and the level of waste in uncovered tanks at least once a dav.
- Use the National Fire Protection Association's buffer ٠ zone requirements for covered tanks containing ignitable or reactive wastes.
- Do not mix incompatible wastes or place ignitable or reactive wastes in tanks unless precautions are taken to prevent dangerous situations.
- Provide at least 2 feet of freeboard (space at the top of each tank) in uncovered tanks, unless the tank has a containment structure or some means of drainage control.

Managing Hazardous Waste On Site (cont.) **Treating Hazardous Waste**

Most hazardous waste cannot be disposed in a landfill unless it meets treatment standards. The Land Disposal Restrictions (LDR) program requires that the waste to be treated to meet limits set by EPA or to be treated using a specific technology. If a basic guidelines for safety and emergency SQG chooses to treat their own waste rather than using a TSDF, then there are additional requirements to meet. These requirements include waste analysis plans, notifications, and certifications.

Preventing Accidents

To minimize the potential for risks from fires, explosions, or other accidents, SQGs must take certain precautions. Alarm systems or some means of internal communication, for example, are required for announcing or signaling an emergency. A cell phone or two-way radio must be available for notifying local police and fire departments. Portable fire extinguishers, spill control materials, and decontamination supplies must be on hand. Equipment that produces foam, automatic sprinklers and adequate water pressure is also needed on site. Finally, EPA requires certain equipment to be tested, adequate aisle space for

emergency response, and a preparedness plan or emergency arrangements made with local officials.

Responding to Emergencies

Although SQGs are not required by EPA to have contingency plans, every facility should be prepared for emergencies. SQGs should establish response, as well as an up-to-date list of emergency contacts.

Shipping Waste Off Site

SQGs must ensure safe transport when shipping hazardous waste to an off-site location. How to select a destination facility, prepare shipments, complete manifest forms, and export hazardous waste are summarized below.

Selecting Destination Facility

SQGs may only send their waste to a regulated TSDF/recycler. Most regulated TSDFs and recyclers will have permits from the state or EPA. It is important for business owners to always check with the DWM to make sure that the facility has the necessary permits and EPA identification number. Hazardous waste generators can retain liability for waste mismanaged at a TSDF.

Shipping and Preparing Manifests

SQGs must properly package, label, and mark all hazardous waste shipments. Most businesses use commercial transporters to ship hazardous waste. Transporters can help with shipping requirements, such as placarding and labeling. Even so, the generator ultimately remains responsible for compliance. The Hazardous Waste Management System is a set of forms, reports, and procedures designed to track hazardous waste from the point of generation until it reaches the off-site waste management facility that will treat, store, or dispose of the hazardous waste. The manifest, which identifies the type and quantity of waste being transported is required by both DOT and EPA. Once the waste reaches the destination facility, the receiving facility returns a signed copy of the manifest to the generator.

Land Disposal Reporting Requirements (LDR)

All hazardous waste that are subject to land disposal requirements must be shipped along with an LDR notice. The notice provides information about the waste, such as the EPA hazardous waste code and the LDR treatment standard. The purpose of the notice is to let the TSDF know that the waste must meet treatment standards prior to land disposed.

Exporting Hazardous Waste

For SQGs who choose to export their hazardous waste, the EPA must be notified at least 60 days before the intended date of shipment in order to obtain consent from the country of import and any countries of transit. Export is prohibited until EPA issues an "Acknowledgement of Consent".

<u>Closure</u>

If a SQG closes, then it must remove all hazardous waste from hazardous waste containers and/or tanks, discharge control equipment, and discharge confinement structures. In addition, any contaminations or leaks must be cleaned up and managed in accordance with hazardous waste regulations.



Small Quantity Generators are required to obtain a federal EPA identification number and a state Certification of Registration with the Kentucky Division of Waste Management.

Summary of Requirements for Large Quantity Generators - LQGs

Large quantity generators (generating more than 1,000 kg or 2,200 lbs) of hazardous waste per month are required to comply with the full set of hazardous waste generator regulations. In addition to requirements for larger quantities of waste, LQGs are subject to the same requirements as SQGs. These additional, and more stringent, requirements for LQGs are summarized below:

- Accumulate waste for no more than 90 days without a permit. Accumulated waste must be stored in containers, tanks, drip pads, or containment buildings.
- Comply with specified technical standards for equipment.
- Complete a contingency plan and comply with other emergency planning and preparedness requirements.
- Retain specified records for three years and submit the <u>Hazardous Waste Annual Report and</u> <u>Assessment Return</u> by March 1 each year. All forms and instructions can be found at: <u>https:// eec.ky.gov/Environmental-Protection/Waste/</u> <u>hazardous-waste/Pages/hazardous-waste-</u> forms.aspx.

- Ensure that wastes meet treatment standards prior to land disposal.
- Send notifications and certifications to TSDFs.
- Maintain a waste analysis plan if treating on site.
- Follow requirements for imports and exports, including the notification of intent to export and the acknowledgement of consent from receiving country.
- If applicable, use various monitoring and control mechanisms to:
 - Control volatile organic compounds (VOCs).
 - Reduce organic emissions associated with certain recycling processes.
 - Control VOCs from hazardous waste tanks, surface impoundments, and containers using fixed roofs, floating roofs, or closed-vent systems routed to control devices.
- Comply with closure notifications and remove all contaminated equipment, structures and soil.
- Meet unit specific closure standards for containers, tanks, containment buildings, and drip pads.

Typical Hazardous Wastes Generated by Different Businesses

TYPE OF BUSINESS	HOW GENERATED	TYPICAL WASTES
Dry Cleaning	Commercial dry cleaning processes	Distillation residues, spent filter cartridges, cooked powder residues, spent solvents, unused
Furniture manufacturing and refinishing	Construction and surface preparation, staining, painting, brush and spray brush cleaning	Ignitable wastes, toxic wastes, solvent wastes, paint wastes
Construction, demolition, and renovation	Land-clearing, demolition, carpentry, floorwork, painting, specialty contracting	Ignitable wastes, toxic wastes, solvent wastes, paint wastes, used oil, acids/bases
Laboratories	Diagnostic and other lab testing	Spent solvents, unused reagents, reaction products, testing samples, contaminated materials
Vehicle maintenance	Air conditioner maintenance, body repair and refinishing, car washing, battery and oil/ fluids replacement, rust-proofing, painting, parts washing and degreasing, product storage and storage tank cleaning, shop cleaning	Acids/bases, solvents, ignitable wastes, toxic wastes, paint wastes, spent rags and wipes, batteries, used oil, oil filters, unused cleaning chemicals, airbag inflators
Printing	Using link lithography, letterpress, screen printing, flexography, plate processing	Acids/bases, heavy metals, spent organic solvents, toxic wastes, unused ink, unused chemicals
Equipment repair	Degreasing, equipment cleaning, rust removal, paint, spray booth, spray guns and brush cleaning	Acids/bases, toxic wastes, ignitable wastes, paint wastes, solvents
Pesticide end users/ application services	Pesticide application and cleanup	Used/unused pesticides, solvent wastes, ignitable wastes, contaminated soil, contaminated rinse water, empty containers
Educational and vocational shops	Auto engine and body repair, metal working, graphic arts-plate preparation, woodworking	Ignitable wastes, solvent wastes, acids/bases, paint wastes
Photo processing	Processing and developing negatives, washing, stabilizing, system cleaning	Acid regenerants, dichromate-based and system cleaners, photographic activators , corrosive and ignitable wastes, silver
Leather manufacturing	Soaking, hair removal, deliming, bating, tanning, retanning, dyeing, fatliquoring, buffer coating	Acids/bases, ignitable wastes, toxic wastes, solvent wastes, unused chemicals, wastewater, suspended solids, alcohols



Universal Waste

Universal wastes are potentially hazardous items that are commonly produced by households and many different types of businesses. To encourage recycling of these items and to lessen the regulatory burden for businesses, the EPA established a rule known as the Universal Waste Rule. The rule is also implemented at the state level through Kentucky's hazardous waste management regulations. Like the federal universal waste rule, management of these wastes are simplified by allowing longer storage and reduced recordkeeping. Although the standards are less stringent, businesses that generate small amounts of universal wastes must still comply with the full requirements for treatment, recycling or disposal. Ultimately, these wastes are taken to a destination facility such as a recycling facility or hazardous waste management facility. For more information about universal waste, visit <u>https://</u> www.epa.gov/hw/universal-waste.

Kentucky's List of Universal Wastes

- hazardous waste batteries, such as lithium, nickelcadmium, silver oxide and lead-acid
- hazardous waste pesticides that are either recalled or collected in collection programs
- thermometers and mercury-containing equipment
- hazardous waste lamps, such as fluorescent bulbs
- aerosol cans containing hazardous waste

Used Oil

Examples of Used Oil Handlers

- Car repair shops, service stations, grocery stores, metalworking industries, boat marinas and other businesses that handle used oil for vehicles and equipment.
- Transporters who pick up used oil and deliver it to oil refineries, processors, or burners.
- Transfer facilities where used oil is temporarily stored for a maximum of 35 days.
- Re-refineries and processors that blend or remove impurities so that the oil can be reused.
- Burners of used oil for energy recovery in boilers, furnaces, or hazardous waste incinerators.
- Marketers of used oil that either ship used oil to be burned as fuel in regulated devices or to be used for energy recovery in devices that meet certain EPA specifications but are not regulated.

Used oil is any oil that has been refined from crude oil or any synthetic oil that has been used. After use, the oil is contaminated with physical or chemical impurities. The best way to manage used oil is to collect, refine, and recycle it so that it may be used again. If your business handles used oil, there are certain EPA requirements known as "management standards" that you must follow. These standards are common sense practices designed to ensure the safe handling of used oil, maximize recycling, and minimize disposal. They relate to storage, recordkeeping, and the clean up of leaks and spills. For more information, visit <u>https://www.epa.gov/</u> <u>hw/managing-used-oil-answers-frequent-questionsbusinesses</u>.

Contact Information

Division of Waste Management and Hazardous Waste Branch

Kentucky Department for Environmental Protection 300 Sower Blvd. 2nd Floor Frankfort, Kentucky 40601 (502) 564-0323 - Office (502) 564-4245 - Fax Email: envhelp@ky.gov Website: https://eec.ky.gov/Environmental-Protection/Pages/default.aspx **Division of Compliance Assistance** (502) 782-6189 - Office (844) 213-0549 - Fax Website: https://eec.ky.gov/Environmental-Protection/Compliance-Assistance/Pages/default.aspx **Division for Air Quality** (502) 564-3999 - Office (502) 564-4666 - Fax Website: <u>https://eec.ky.gov/Environmental-Protection/Air/Pages/default.aspx</u> **Division of Waste Management** (502) 564-6716 - Office (502) 564-0094 - Fax Website: https://eec.ky.gov/Environmental-Protection/Waste/Pages/default.aspx **Division of Water** (502) 564-3410 - Office (502) 564-4245- Fax Website: https://eec.ky.gov/Environmental-Protection/Water/Pages/default.aspx **Environmental Response Team** (502) 564-2380 - Office (800) 928-2380 - 24-hour Emergency Hotline Website: https://eec.ky.gov/Environmental-Protection/Waste/Pages/EmergencyResponseBranch.aspx

Useful Links and Resources

https://www.epa.gov/hwgenerators

https://www.epa.gov/hw/criteria-definition-solid-waste-and-solid-and-hazardous-waste-exclusions

https://www.epa.gov/hwgenerators/final-rule-hazardous-waste-generator-improvements

https://www.epa.gov/hwgenerators/frequent-questions-hazardous-waste-generators

https://www.epa.gov/hwgenerators/managing-your-hazardous-waste-guide-small-businesses



Kentucky Division of Compliance Assistance

Kentucky Energy and Environment Cabinet 300 Sower Boulevard, 1st Floor, Frankfort, KY 40601 *Assistance Hotline:* envhelp@ky.gov | 502-782-6189