

# Kentucky Auto Salvage

## Environmental Compliance Guide

2017



**Kentucky Division of Compliance Assistance  
Environmental Compliance Assistance Program  
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Kentucky Environmental Compliance Assistance Program  
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Kentucky Division of Water  
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### **Questions should be directed to:**

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# INTRODUCTION

The Division of Compliance Assistance's (DCA's) mission is to enable excellence in environmental compliance, recognize environmental leadership and facilitate activities that enhance the welfare of Kentucky's citizens and environment. This will require vision, commitment and determination on the part of the agency, Kentucky's citizens and the individuals and companies governed by Kentucky's environmental requirements. DCA is committed to leading this effort and anxious to form partnerships with anyone interested in ensuring this mission's success.

## ***What is the purpose of this manual?***

This manual provides the auto salvage facility sector with concise, comprehensive environmental regulatory information in an easy-to-use format. This manual contains information concerning the various environmental rules with which auto salvage facilities must comply and for which Kentucky Department for Environmental Protection (DEP) has jurisdiction.

**NOTE:** This manual does not address all rules that apply to the auto salvage facility sector, only those over which DEP has jurisdiction. There are other state and federal agencies, as well as potentially some local agencies, which may have rules to regulate a facility. A list of some of these agencies can be found at the end of this section.

## ***Who should use this manual?***

Owners and operators of auto salvage facilities in Kentucky will find this manual most helpful. Auto shredders and secondary aluminum smelters may find the information in this manual useful as well.

This manual is not geared toward one specific size auto salvage facility. The information contained in this manual applies to all facilities, regardless of size. However, some rules may apply differently to facilities of differing size. For example, the chapter entitled "[Complying with the Hazardous Waste Rules](#)" describes rules that apply to hazardous waste generators of different categories, based on the volume of hazardous waste generated per month. The stormwater rules, however, apply equally to all facilities, regardless of size. Read each section carefully to determine if and/or how each rule applies to a particular facility.

## ***Regulations covered***

This manual includes information on the following issues: Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act, Safe Drinking Water Act and Kentucky's solid waste and spill rules. As noted above, this manual may contain limited information on rules administered by other local, state or federal agencies.

## ***Who to call for assistance***

If questions, concerns or the need for compliance assistance arises, please contact the appropriate DEP office listed below.

- **Division of Compliance Assistance (DCA)**  
Environmental Compliance Assistance Program  
300 Sower Boulevard  
Frankfort, KY 40601  
502-782-6189 or [envhelp@ky.gov](mailto:envhelp@ky.gov)  
<https://eec.ky.gov/Environmental-Protection/Compliance-Assistance/Pages/default.aspx>
- **Division for Air Quality (DAQ) [All counties except Jefferson]**  
300 Sower Boulevard  
Frankfort, KY 40601  
502-564-3999  
<https://eec.ky.gov/Environmental-Protection/Air/Pages/default.aspx>
- **Louisville Metro Air Pollution Control District (LMAPCD)  
[only Jefferson County]**  
701 W. Ormsby Avenue  
Louisville, KY 40203  
502-574-6000  
<https://louisvilleky.gov/government/air-pollution-control-district>
- **Division of Water (DOW)**  
300 Sower Boulevard  
Frankfort, KY 40601  
502-564-3410  
<https://eec.ky.gov/Environmental-Protection/Water/Pages/default.aspx>
- **Division of Waste Management (DWM)**  
300 Sower Boulevard  
Frankfort, KY 40601  
502-564-6716  
<https://eec.ky.gov/Environmental-Protection/Waste/Pages/default.aspx>
- **Environmental Response Team's 24-Hour Emergency Hotline**  
800-928-2380 or 502-564-2380 and  
National Response Center at 800-424-8802

## ***Open Records Review–File Room Information***

The public is welcome to view the various branch office public files. To view a file, check with the appropriate division for specific requirements and office hours. Normal business is conducted Monday through Friday, excluding state holidays. More information is available at <https://eec.ky.gov/pages/Open-Records.aspx>

## ***Other State Agencies That May Regulate an Auto Salvage Facility***

- **Kentucky State Fire Marshal**  
500 Mero Street  
1<sup>st</sup> Floor  
Frankfort, KY 40601  
502-573-0382  
<http://dhbc.ky.gov/sfm/Pages/default.aspx>  
\* The Kentucky State Fire Marshal’s Office is responsible for overseeing and inspecting the installation of any underground tank or storage device.
- **Kentucky Department of Labor**  
**Division of Education and Training**  
**KY Occupational Safety and Health Program (KYOSH)**  
500 Mero Street  
3<sup>rd</sup> Floor  
Frankfort, KY 40601  
502-564-3070  
<https://labor.ky.gov/standards/Pages/Occupational-Safety-and-Health.aspx>  
\* The Kentucky Department of Labor is responsible for enforcing Occupational Safety and Health Administration regulations in the state of Kentucky. As a division of the Department of Labor, the KYOSH program provides confidential compliance assistance to Kentucky’s regulated community through presentations, training programs and site visits.
- **Kentucky Transportation of Hazardous Material**  
**Kentucky Vehicle Enforcement Office**  
919 Versailles Road  
Frankfort, KY 40601  
502-782-1800  
<https://kentuckystatepolice.org/commercial-vehicle-enforcement/>  
\*The Kentucky Vehicle Enforcement Office is responsible for promoting and encouraging a safe driving environment through education and safety awareness while enforcing State and Federal laws and regulations, placing special emphasis on commercial vehicles.



## **Other Information Sources**

- **National Spill Response Center**  
800-424-8802
- **U.S. Environmental Protection Agency (EPA) Office of Atmospheric Programs**  
Main Code 6201A  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460  
800-296-1996
- **EPA's RCRA Tools and Resources**  
<https://www.epa.gov/rcra/resource-conservation-and-recovery-act-rcra-tools-and-resources>
- **Local Health Departments**  
For a list of local health departments, visit the Kentucky Cabinet for Health and Family Services' website at <https://chfs.ky.gov/agencies/dph/dafm/Pages/lhd.aspx>.
- **Solid Waste Coordinators**  
Refer to DWM's Solid Waste Coordinator list at <https://eec.ky.gov/Environmental-Protection/Waste/recycling-and-local-assistance/Documents/Solid%20Waste%20Coordinators.pdf>
- **Kentucky Pollution Prevention Center**  
310 N. Whittington Parkway  
Burhans Hall, Room 206  
Louisville, KY 40222  
502-852 0965  
<http://kppc.org/>
- **Kentucky Small Business Development Center**  
1 Quality Street, Suite 635  
Lexington, KY 40507  
859-257-7668  
<https://www.ksbdc.org/>

# ENVIRONMENTAL REGULATIONS THAT MAY APPLY TO A FACILITY

A number of regulations, including the Clean Air Act (CAA), Clean Water Act (CWA) and Resource Conservation and Recovery Act (RCRA), as well as other state and federal rules, may potentially apply to auto salvage operations, depending on the types of activity conducted. Some regulations that are commonly relevant to auto salvage facilities focus on the following topics.

## ***Air Regulations***

### **Activities, Operations and Equipment**

Operations and activities that could occur at auto salvage facilities have the potential to release air contaminants or air pollutants, may require a Kentucky Division for Air Quality (DAQ) permit. An air contaminant or air pollutant includes smoke, dust, soot, carbon or any particulate matter, radioactive matter, noxious acid, fumes, gases, odor, vapor or any combination of these items (KRS 224.1-010(1)). The type of permit is dependent on the amount of air pollutants that the facility has the Potential-to-Emit if the facility were to operate 24 hours a day, 7 days a week with all processes operating at maximum capacity.

Equipment commonly found at auto salvage facilities, which are known to produce air contaminants and may require permitting include the following:

- welders
- spray booths
- boilers
- generators
- water heaters

For more information on determining whether or not a permit is necessary for a facility, please see the Air Quality Potential-to-Emit Compliance Guide, available online at <https://eec.ky.gov/DCAPotentialToEmitComplianceGuide2019.pdf> or contact DCA at 502-782-6189 or [envhelp@ky.gov](mailto:envhelp@ky.gov).

### **Fugitive Dust**

Businesses or operations that can create dust must take every reasonable precaution to control it and prevent it from crossing property lines. Release of this type of non-point fugitive dust pollution may result in enforcement action. More information is available online at <https://eec.ky.gov/Air/Documents/Fugitive%20Dust%20Fact%20Sheet.pdf>

## Freon Removal from MVAC Systems

Auto salvage facilities that remove Freon from Motor Vehicle Air Conditioning (MVAC) systems are required to use EPA-approved recovery and/or recycling equipment and allow only technicians certified by an EPA-accredited training program to perform MVAC work. See the “[Potential Waste Streams](#)” chapter for more information and requirements pertaining to the use, handling and transfer of recovered refrigerants. Information on EPA-approved equipment and EPA-accredited training programs is available via the EPA’s website, along with information on complying with the Section 608 Refrigerant Recycling Rule, located at <http://www.epa.gov/section608>

## Open Burning

It is illegal for businesses to conduct open burning with few exceptions. For more information, please visit <https://eec.ky.gov/Environmental-Protection/Air/Pages/Open-Burning.aspx> or call DAQ at 502-564-3999.

## Solvents

### *Chlorinated Solvents (for parts washing, etc.)*

Chlorinated solvents (see listing below) used in containers with a capacity of two gallons or greater are regulated by the EPA. Any non-chlorinated solvent that has a chlorinated solvent content of two percent (2%) or more will also fall under this regulation. Facilities using chlorinated solvents in the quantities or percentages described above must follow the regulations under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Halogenated Solvents (40 CFR Part 63, Subpart T). The NESHAP requires facilities to install equipment and implement standardized work practices to reduce the emissions of hazardous air pollutants. Due to the complexity of the regulations applying to chlorinated solvents, this manual does not address the chlorinated solvent NESHAP in detail. Contact DCA at 502-782-6189 or the DAQ at 502-564-3999 for assistance.

Common examples of chlorinated solvents include the following:

- chlorobenzene (monochlorobenzene or benzene chloride)
- trichloroethylene (trichloroethane, ethinyl trichloride)
- methylene chloride (dichloromethane, methylene dichloride, methylene bichloride)
- perchloroethylene (ethylene tetrachloride, tetrachlorethylene)
- 1,1,1-trichloroethane (methyl chloroform, chloroethene)

Chlorinated solvents are listed hazardous wastes (see the chapter entitled “[Complying with the Hazardous Waste Rules](#)” for a discussion of listed hazardous wastes). Any time a waste is

contaminated with a listed hazardous waste, the mixture is automatically considered to be a hazardous waste, regardless of the concentration of listed waste.

*Keep in mind that using even a small quantity of liquid chlorinated solvents may result in a facility needing to follow environmental regulations.*

### ***Solvents Used by Facilities in Boone, Kenton, Campbell Counties***

A 2006 air regulation restricts the type of parts washing solvent that may be used in these three counties (401 KAR 59:185). Solvents must have a vapor pressure not to exceed one millimeter of mercury (1.0 mm Hg).

This restriction applies when a solvent is sold to an individual or business in amounts greater than five (5) gallons during any seven (7) consecutive business days.

Check the MSDS sheet to ensure that the solvent meets this vapor pressure limit. End users of these lower vapor pressure solvents must keep a record of each purchase, including the following information:

- name and address of the solvent supplier
- date of purchase, the type of solvent
- volume of each unit
- total volume of the solvent; and
- vapor pressure of the solvent

Information concerning aqueous-based and petroleum-based solvents is contained in the chapter entitled "[Potential Waste Streams](#)."

### **Sweat Furnaces**

A sweat furnace enables recyclers to convert piles of mixed aluminum scrap into more uniform, saleable ingots or sows and is covered by NESHAPs for secondary aluminum (40 CFR 63, Subpart RRR). Facilities utilizing a sweat furnace are required to obtain an air quality permit for the operation prior to installation.

- Sweat furnaces must be operated and maintained with an afterburner, having a combustion chamber residence time of 0.8 seconds at or above 1600°F. Performance testing is not required if control mechanisms on the unit are operated and maintained to meet the preceding specifications unless specifically requested by DAQ.

- The sweat furnace must not discharge emissions in excess of 0.80 nanograms of dioxin/furan Toxic Equivalents per dscm ( $3.5 \times 10^{-10}$  grams per dscf) at 11 percent oxygen.
- The sweat furnace must have a device that continuously records the operating temperature of the afterburner. It must be properly calibrated and maintained. The device must at least record the temperature in 15-minute block averages and determine the average temperatures for each three-hour block period.
- Each afterburner must be inspected at least yearly, and the results must be recorded.
- Each sweat furnace owner must submit a notification of compliance status report within 60 days of a performance test.
- A startup, shutdown and malfunction plan/report must also be submitted.

For further information concerning the requirements for sweat furnaces, contact DAQ 502-564-3999 or DCA at 502-782-6189.

## ***Water Regulations***

### **Drinking Water**

A facility that provides water to customers or the general public may be considered a public water system (PWS) if it does any collection, treatment, storage or distribution of water. This refers to facilities that are not connected to a municipal water system, but use a well or their own water system. There are primarily two categories of public water systems that could apply to the auto salvage facility sector.

- If a facility provides water to the public via public restrooms or drinking water fountains, that facility is considered a “transient non-community water system.”
- If a facility regularly serves the same 25 or more persons (including employees) at least six months of the year, the facility is considered a non-transient, non-community water system.

If a facility fits either of the two descriptions provided above, the Division of Water (DOW) drinking water regulations apply. Please contact DOW’s Drinking Water Program at 502-564-3410 or visit the website at <https://eec.ky.gov/Environmental-Protection/Water/Drinking/Pages/Drinking%20Water.aspx>

A PWS must be permitted prior to construction with DOW’s Water Infrastructure Branch and after construction, must continuously comply with all the health-based requirements established in the U.S. Safe Drinking Water Act. Included in these requirements are operational standards for sampling, testing, monitoring and reporting on a wide range of possible contaminants. The content of these rules is different, depending on the type of public water supply system involved.

These rules also developed the various public notice requirements to be met by owners or operators of public water systems that fail to comply with the maximum contaminant levels.

Public water supply systems are required to be operated by a Kentucky-certified operator present whenever the facility is making water. All operator certifications are valid for two years and must be renewed for the operator to remain certified. More information on operator certifications is available online at: <https://eec.ky.gov/Environmental-Protection/Compliance-Assistance/operator-certification-program/Pages/default.aspx>

## **Septic Systems**

Sanitary wastewater generated at a facility may be discharged to an on-site septic system, with approval from the Cabinet of Health and Family Services (CHFS). Please contact CHFS' Environmental Management Branch at 502-564-4856. Industrial wastewater may not be discharged to a septic system. See the section below entitled "[Wastewater](#)" for additional discussion on wastes and septic systems.

## **Prevention of Spills into Navigable Waters**

Depending on a facility's total aboveground storage capacity for all types of oils kept on-site (petroleum, synthetic, animal or vegetable; product or waste), it may be subject to the federal Spill Prevention, Control and Countermeasure (SPCC) rule. See [Emergency Plans and Employee Training](#).

## **Groundwater**

Any facility that is engaged in activities that have the potential to pollute groundwater is required to develop and implement a groundwater protection plan (GPP) under 401 KAR 5:037. Those activities include storage, treatment, disposal, or handling of hazardous waste, solid waste, or special waste in drums, tanks, surface impoundments, incinerators, landfills, other containers, or in piles. A GPP identifies activities at a site that have the potential to pollute groundwater and defines best management practices (BMPs) used to prevent groundwater pollution. Anyone can develop a GPP, no professional certification or training is required. Guidance on how to develop a GPP is available online at <https://eec.ky.gov/Environmental-Protection/Water/GW/Pages/default.aspx>.

## **Stormwater**

Stormwater generated from an auto salvage facility may be regulated by Kentucky's stormwater regulations under the KPDES permitting process. New or existing stormwater discharges to industrial activity are affected. Two types of permits are available—general and individual. General permits are most often obtained by auto salvage facilities. However, in some cases, an individual permit may be required. To obtain a general permit, a facility needs to submit a Stormwater Pollution Prevention Plan (SWPPP) to DOW's Surface Water Permits Branch. The SWPPP requires a facility to identify activities and industrial areas that contribute to or have the potential to contribute to stormwater contamination, identify where best management practices

need to be established, and conduct sampling. The SWPPP needs to be certified by a qualified professional before it is submitted to DOW.

Questions concerning stormwater regulations should be directed to the DOW, Surface Water Permits Branch at 502-564-3410. More information is available online at <https://eec.ky.gov/Environmental-Protection/Water/PermitCert/KPDES/Pages/default.aspx>

## **Wastewater**

Auto salvage facilities may be subject to industrial wastewater regulations administered by DOW and/or a local wastewater treatment plant, depending upon where the facility's drains discharge and the constituents present in its wastewater. If a facility generates industrial wastewater, there may be requirements it must meet in order to ensure that the wastewater is properly managed. There are two situations in which a facility might be required to obtain a permit for wastewater generated by the facility, depending upon how it is ultimately disposed. These two situations are discharges to waters of the Commonwealth and discharges to a publicly owned treatment works (POTW).

### ***Discharges to waters of the Commonwealth***

Facilities discharging wastewater via a point source (such as a pipe, etc.) directly to the waters of the Commonwealth are required to obtain an individual Kentucky Pollution Discharge Elimination System (KPDES) permit. KPDES permits can be either general or individual permits. An individual KPDES stormwater permit sets individual discharge limits. A general permit is a “one size fits all” permit issued for specific discharges, such as stormwater runoff, non-contact cooling water or stone quarry discharges. An individual permit is site-specific and unique to a facility. Stormwater permits, such as those discussed above, are considered part of KPDES general permits. Permits contain limits on the quantity, discharge rate and concentrations of pollutants in the water that is discharged from a point source into waters of the Commonwealth. There are permit fees associated with these permits. The amount of the fee is dependent upon the type of permit issued.

### ***Discharges to a POTW***

Facilities discharging industrial wastewater into a municipal sewer connected to a POTW may need a pretreatment permit. In order to discharge to the POTW, standards set by the receiving POTW must be met. This may require a facility to treat its wastewater prior to discharging to the sewer.

Depending upon the type and level of contaminants in a facility's wastewater, the wastewater may be considered a hazardous waste. When hazardous waste enters the sanitary sewer, it is regulated by the Division of Waste Management (DWM) Hazardous Waste Branch and the POTW receiving the wastewater.

### ***Discharges to holding tanks***

Facilities discharging wastewater to an underground holding tank may need a construction permit from DWM prior to tank installation. In addition, different regulations apply to wastewater removed from the tank, depending on the contents of the tank and method of disposal used.

Process wastewater meeting POTW's standards may be hauled directly to the POTW. Facilities disposing of wastewater in a manner other than sending it to a POTW need to determine whether it is a hazardous waste. If a facility's wastewater is a hazardous waste, it will need to ensure that the storage tank meets hazardous waste rules and that the facility properly manages the wastewater upon removing it from the tank. See the chapter entitled "[Complying with the Hazardous Waste Rules](#)" for additional information.

## **Wetlands**

Swamps, marshes, bogs, fens, sloughs and bottomlands are examples of areas that may be considered wetlands. In general, wetlands are areas where water accumulates at or near the surface for some part of the year. Some types of wetlands, such as cattail marsh, are easy to recognize, while others, such as pin oak flatwoods, require professional experience. Both federal and state law requires authorization from DOW before conducting any activity that may result in a discharge of pollutants, including fill, to wetlands. This means facilities wishing to discharge pollutants to wetlands or other water bodies through activities, such as filling, excavating or mechanical clearing, must first receive state authorization.

An owner of an auto salvage facility wishing to discharge pollutants to wetlands or other water bodies through activities, such as filling, excavating or mechanical clearing, must first receive authorization from DOW and the U.S. Army Corps of Engineers (ACE), commonly referred to as a Section 404 or Dredge and Fill Permit, to do so. Discharges to wetlands that are in a floodplain also require authorization from DOW. DOW works closely with the ACE to coordinate the permit application process as much as possible. The ACE decision concerning the extent of federal jurisdiction affects the mechanism under which DOW reviews a particular project. Therefore, DOW recommends that any potential applicant first contact the ACE to begin the application process and determine whether a federal permit is required.

However, because both agencies have authority/jurisdiction, both need to be contacted before any discharge to or other activity in a wetland or other water body occurs. If the USACE determines a federal permit is needed, a facility must first obtain a Section 401 Water Quality Certification from DOW.

DOW will review the proposed activity to determine if it will comply with Kentucky law, including state water quality standards. DOW will require a facility to minimize any unavoidable impacts and provide compensatory mitigation for any remaining adverse impacts to wetlands and other waters. DOW will deny water quality certification if a facility cannot show its discharges comply with state law and may cause violations of water quality standards. As an example, DOW may deny certification if the impact can be avoided or the proposed compensatory mitigation cannot offset adverse impacts to water quality. A facility may not proceed with a project until it has received a certification (or other authorization) from DOW.



Again, because the federal government's jurisdiction is different than the state's, DOW must be contacted to determine what, if any, state authorization is needed before a facility may legally discharge pollutants (including fill material) to a wetland.

## ***Waste Regulations***

### **Hazardous Waste**

There are potentially a number of regulations that a facility must comply with if the facility generates and/or stores hazardous waste. These are discussed in detail in the chapter entitled, "[Complying with the Hazardous Waste Rules](#)." If a facility generates hazardous waste, it may need to submit a Notification of Hazardous Waste Activity (form DEP7037) to DWM, Hazardous Waste Branch concerning this activity. In addition, if a facility treats, stores or disposes of hazardous waste, it may need a permit from DWM Hazardous Waste Branch before beginning any of these activities. Information concerning the notification and permit requirements may be obtained by visiting DWM Hazardous Waste Branch website at <https://eec.ky.gov/Environmental-Protection/Waste/hazardous-waste/Pages/default.aspx> or by contacting DWM at 502-564-6716.

### **Solid Waste**

Automobile and truck recyclers and salvage yards are a type of solid waste site or facility, but are not required to obtain a permit. These operations are regulated as Permit-by-Rule activities, meaning no written authorization is required, but the operation must comply with the Environmental Performance Standards of 401 KAR 47:030.

Solid waste generated by activities at the facility must be properly disposed. At no time should solid waste be open dumped or buried without proper authorization. Open dumping is the improper and illegal disposal of regulated solid waste at an unpermitted solid waste disposal site. Examples of solid waste include:

- waste tires
- plastic
- cardboard
- upholstery
- general household garbage

No notifications are required to DWM Solid Waste Branch for disposal of everyday trash and garbage, and other nonhazardous solid waste at a permitted disposal facility. A facility needs to ensure, however, that a hazardous waste determination is made for all industrial waste streams generated. The waste determination will determine the type of treatment, disposal or recycling

options. Refer to the chapter entitled, “[Complying with the Hazardous Waste Rules.](#)” for information concerning the process to be used for making a waste determination and disposal of hazardous waste.

Facilities wishing to dispose of solid waste on-site are required to obtain a permit from the DWM Solid Waste Branch. Be aware that constructing and operating these facilities requires substantial resources and technical expertise to perform and comply with all site evaluation and permitting requirements. Operating permits are generally valid for five years and must be renewed to continue operation after the five year period.

Facilities wishing to operate a waste tire storage facility or waste tire processing facility must first obtain a registration from DWM Solid Waste Branch. To obtain a registration application or to learn more about Kentucky’s Waste Tire Program, call 502-564-6716. For additional information on waste tire management at the facility, see Waste Tires in the chapter entitled, “[Potential Waste Streams.](#)”

## **Underground Storage Tanks**

Facilities owning or operating underground storage tanks (UST), may be regulated by the DWM’s underground storage tank regulations. Tanks containing regulated hazardous waste are regulated under hazardous waste rules rather than the UST rules.

An underground storage tank is a tank or combination of tanks that hold regulated substances and have at least 10 percent of their volume underground (including any underground piping connected to the tank). USTs that contain petroleum or hazardous substances are regulated by DWM UST Branch. Tanks that contain heating oil used to heat a facility, tanks located on or above the floor of underground areas (such as basements) and tanks of 110 gallons or smaller are not considered USTs. Septic tanks and systems for collecting stormwater and wastewater are also not considered USTs.

Facilities owning or operating a UST, must complete and submit a UST Facility Registration Form (Form 7112), within 30 days of the occurrence of certain situations. These situations include the following: new tank/piping, new owner/operator, upgrade, repair, temporary closure, change in service and permanent closure. This form is available online at <https://eec.ky.gov/Environmental-Protection/Waste/underground-storage-tank/Pages/Regs.aspx>

Keep in mind that a facility must ensure that whoever performs or oversees tank system installations, testing, upgrading, closure, removal and change-in-service is certified by the Kentucky State Fire Marshal’s (KSFM) office. The certified person must sign and provide the KSFM certification number on all Notification for Underground Storage Tanks forms when a tank is installed, upgraded, tested or permanently closed. Every UST system in use and every new UST system to be put in use must be protected from corrosion, have spill and overflow protection and a leak detection system. All UST systems must be registered with DWM UST Branch. Tank fees are \$100 for the first tank and \$50 per each additional tank with a permit application. Following all installation activity and inspections, a \$30-per-tank fee is assessed annually by the DWM (based on DWM’s fiscal year). To obtain additional information about the

UST program, contact the DWM UST Branch at 502-564-5981 or the website at <https://eec.ky.gov/Environmental-Protection/Waste/underground-storage-tank/Pages/default.aspx>

## **Universal Waste**

The universal waste rule consists of tailored management standards for certain types of hazardous waste and is designed to reduce regulatory requirements by promoting environmentally sound recycling and disposal practices. The universal waste rules are designed to make compliance easier.

Universal wastes include batteries (see optional requirements for lead-acid batteries in 40 CFR 266), thermostats and lights/lamps (e.g., fluorescent, high-intensity discharge, neon, mercury vapor, high-pressure sodium and metal halide lamps). Universal wastes have fewer waste management rules that apply to them. For more information about the generation, storage, transportation and disposal of universal wastes, refer to the DWM's Universal Waste Rule, available at <https://eec.ky.gov/Environmental-Protection/Waste/recycling-and-local-assistance/Fact%20Sheets/Universalwastefactsheet.pdf>

The universal waste rule requires facilities to

- Educate employees on proper handling and emergency procedures associated with waste tubes/lamps, batteries and thermostats;
- Contain all releases of waste and residues and
- Make a hazardous waste determination on any potential universal waste and manage accordingly.

Items that could be considered universal waste, but are not managed as such, must be treated as hazardous waste. In all cases, DWM encourages recycling rather than disposal.

# POTENTIAL WASTE STREAMS

Auto salvage facilities produce a wide variety of waste types, including many potentially hazardous wastes. This section focuses on common wastes generated at auto salvage operations and how to appropriately handle them.

## ***Aerosol Containers***

Spent aerosol containers may be sent to a scrap metal recycler for recycling. An aerosol container is considered to be empty when the pressure in the container approaches atmospheric pressure (i.e., nothing comes out of the can when the nozzle is not clogged and is pressed).

**NOTE:** A clogged container can contain materials, and therefore, is not considered to be empty. More information on how to determine if a can is empty and how to properly dispose of or recycle aerosol cans can be found in DCA's Aerosol Can Management fact sheet:

<https://eec.ky.gov/Environmental-Protection/Compliance-Assistance/DCA%20Resource%20Document%20Library/AerosolCanFactSheet.pdf>

## **What Must Be Done to Be in Compliance?**

Listed below are the management responsibilities that a facility must follow for aerosol cans that contain or contained hazardous chemical(s).

- Ensure that aerosol cans are empty prior to sending them to a scrap metal recycler.
- Ensure that aerosol cans are totally empty prior to recycling on-site.
- If the can no longer has a sufficient amount of propellant to force the product out, puncture and drain the container. The product drained from the punctured container must be used for its intended purpose or characterized to determine if it is a hazardous waste. Be sure to use the product's MSDS sheet in order to be familiar with its hazards prior to puncturing and draining the container. Also ensure that appropriate personal protective equipment (e.g. safety glasses and gloves) are worn during this process.
- Make a hazardous waste determination on the container and remaining liquid product contained in the can, as well as the gas propellant, and manage it accordingly.

## ***Antifreeze***

Under Kentucky's Division of Waste Management (DWM) hazardous waste regulations, ethylene glycol and propylene glycol (i.e., virgin antifreeze) are not listed hazardous wastes. However, contact with cooling system parts may cause used antifreeze to become contaminated with heavy metals, such as lead, chromium and cadmium. This contamination may make the antifreeze a hazardous waste. Similarly, used antifreeze mixed with other wastes (during storage, etc.) may result in a mixture that is a hazardous waste. Each facility is responsible for making a

hazardous waste determination on its used antifreeze. This determination can be based on analytical test results of the used antifreeze or it may be based on the knowledge of the waste and how it was generated and managed. However, it is possible a facility generates used antifreeze that is a hazardous waste if the facility:

- Generates used antifreeze primarily from older vehicles (i.e., vehicles with metal radiators and lead soldered joints.)
- Generates a type of antifreeze other than traditional ethylene glycol or propylene glycol-based antifreeze.
- Mismanages its used antifreeze after it has been drained from the vehicle (i.e., if the antifreeze is mixed with hazardous wastes or other contaminants).

## **Can Antifreeze Be Recycled?**

Yes, however, there are some things to keep in mind if it is decided to do so. They are as follows:

### ***Purchasing Recycling Equipment***

A facility may purchase antifreeze-recycling equipment to perform recycling on-site. To treat waste on-site, the facility must submit an official request with DWM. Please contact DWM, Hazardous Waste Branch at 502-564-6716 for more information.

The following two models of antifreeze recycling equipment are available:

#### **Closed-loop/on-vehicle model**

The closed-loop/on-vehicle models are equipped with hoses that attach directly to the vehicle in order to flush the cooling system, recycle the antifreeze and replenish the cooling system. The advantage to this type of system is that the used antifreeze is contained during each step of the process, thereby reducing the possibility for improper handling and storage.

**NOTE:** Closed-loop systems may also be used to recycle antifreeze that will be stored for later use. The disadvantage of this system is that the antifreeze is typically recycled through filtration or deionization, which does not remove most dissolved contaminants. Antifreeze filters must be managed as hazardous waste or proven that they are non-hazardous through laboratory analysis.

#### **Batch system/off-vehicle model**

The second model is the batch system or off-vehicle model that requires the service technician to handle the antifreeze during each step of the process (i.e., drain the antifreeze, pour it into the recycling unit and then replenish the vehicle). These types of systems may recycle the antifreeze by filtration or distillation. Distillation units remove suspended solids as well as dissolved contaminants.

## ***Contracting with a Service Company to Recycle Used Antifreeze***

Contracting this service to an outside company has certain advantages over purchasing recycling equipment. First, contracting this service does not require the initial capital expense of purchasing a recycling unit. Secondly, the filters and filter solids that are generated during the recycling process may be hazardous wastes. If recycling on-site, hazardous waste determination must be made and the waste must be managed accordingly. An outside company that recycles used antifreeze off-site is responsible for the hazardous waste generated during the recycling process.

### **On-site recycling**

Using an on-site mobile antifreeze recycling service involves having a recycling service visit the facility with a mobile coolant-recycling unit.

**NOTE:** Both the facility and the mobile recycler are considered co-generator for any hazardous waste generated as a result of on-site antifreeze recycling, unless there is a contract or agreement that specifies who is solely responsible for the hazardous waste generated.

### **Off-site recycling**

Another option is to send used antifreeze off-site for recycling with a legitimate recycling company. Used antifreeze may be stored on-site for later pick-up. Recycling companies usually require a minimum pickup quantity of 50-55 gallons and, in addition to picking up used antifreeze, can also supply recycled antifreeze.

## ***Some Things to Keep in Mind about Antifreeze Recycling***

- Check vehicle manufacturers' warranties prior to using recycled antifreeze.
- Chemical additives must be added to the recycled antifreeze prior to its reuse in a vehicle. Recycling equipment vendors provide these additive packages.
- The use of recycling equipment will generate potentially hazardous wastes, such as spent filters or filter solids.
- Keep all receipts of used antifreeze shipments and filter management. The written receipts or records must include:
  - Name and address of the generator and the recycling facility for off-site shipments.
  - The amount of used antifreeze shipped or recycled on-site.
  - The amount of waste antifreeze filters shipped off-site.
  - Date of shipment or recycling.

## **What Must Be Done to Be in Compliance?**

If used antifreeze is considered to be a hazardous waste, it must be managed according to the Hazardous Waste Rules. Listed below are the requirements for small quantity generators to properly handle used antifreeze (more requirements apply to large quantity generators).

### **If it is determined a facility's used antifreeze is a hazardous waste, it must:**

- Label all containers in accordance with Resource Conservation and Recovery Act (RCRA) requirements. Remember to clearly mark the words HAZARDOUS WASTE, as well as the date the waste began to accumulate (or the date the container was completely filled if there is a satellite accumulation area onsite) on the used antifreeze container.
- Keep storage containers closed to prevent evaporation and spills.
- Conduct weekly inspections to ensure that the containers are in good condition. Look for leaks and for deterioration caused by corrosion or other factors. If a container leaks, put the hazardous waste or the leaking drum in another container.
- Keep monthly records of the amount of used antifreeze accumulated.
- Manifest drums of used antifreeze to a Treatment, Storage, and Disposal (TSD) facility.
- Use only permitted waste transporters with an U.S. Environmental Protection Agency (EPA) identification number to transport drums of antifreeze off-site.

### **Even if a facility determines that its used antifreeze is not a hazardous waste, it must not:**

- Put antifreeze into the environment (i.e., onto the ground or into streams).
- Pour antifreeze into any drains if a facility is on a POTW system, unless the local wastewater treatment plant has been contacted in order to make sure it can handle such a discharge.
- Discharge antifreeze to a septic system.

If a facility recycles antifreeze on-site, a hazardous waste determination must be made on the filters and sludge, or they can treat them as hazardous wastes. Because the contaminants are concentrated in the filter and/or sludge, it is likely that these may be hazardous wastes.

## ***Batteries***

Automotive batteries, such as the traditional lead-acid car battery or batteries from hybrid and electric vehicles (commonly nickel metal hydride or lithium ion batteries), may be managed

under universal waste rules. See the “[Universal Waste](#)” section of “Waste Regulations” for more details.

Kentucky Statute requires that facilities recycle their used lead-acid batteries (KRS 224.50-410). If a facility sells batteries, a sign shall be posted informing customers of the facility’s legal obligation to accept used batteries for recycling. DWM also requires that used batteries are properly stored.

## **What Must Be Done to Be in Compliance?**

Listed below are requirements pertaining to the sale and disposal of batteries, as well as the requirements that must be followed to ensure batteries are properly serviced, stored and recycled.

### **If a facility sells batteries**

Under Kentucky Statute, a business shall post a sign indicating it accepts used batteries when a new battery is sold (KRS 224.50-413). An example sign is shown below:

Recycle your used batteries. Improper disposal of batteries is against the law.

It is illegal to put used motor vehicle batteries or other vehicle or boat batteries  
in the trash.

State law requires businesses to accept used batteries for recycling if  
purchasing a new battery from the business.

### **Battery management**

Ensure that used batteries are properly managed and recycled by doing the following:

- Properly store all spent batteries in an area with secondary containment or in an area that provides a means to control and contain any battery acid spillage. Do not store batteries near open flames or ignitable sources. Do not stack batteries as this may cause them to crack and leak hazardous components. If batteries are stored outdoors, the storage area must be curbed to contain leaks and covered to prevent snow and rain from entering.
- Waste batteries, or any container in which waste batteries are stored, must be clearly labeled as “Waste Battery(ies),” or “Used Battery(ies).”
- Within 90 days from the date the spent lead-acid battery was received, the battery must be transferred
  - back to the wholesaler;
  - to a facility that collects lead-acid batteries for delivery to a recycling facility; or



- to a permitted secondary lead smelter.
- Should a battery leak onto the ground, the release must be immediately contained and whether any released material is hazardous or nonhazardous must be determined.

**GOOD IDEA:** Storing batteries on a wire shelf with plastic spill trays placed below the shelf will allow easy inspection of all batteries for damage and to contain any leaking battery acid. By storing batteries in this manner, one can readily determine which battery is leaking and can properly neutralize the acid. Another way to store batteries would be to utilize an EPA-approved storage box.

## ***Brake and Clutch***

Normal wear on asbestos-containing brake and clutch pads causes the pads to release a friable dust, and may also cause the pads themselves to be friable. The term “friable” means a material that contains more than one percent asbestos that, when dry, can be crumbled or reduced to powder by hand pressure.

Brake cleaners and other products used when performing brake and clutch work may cause used brake pads, clutch pads and/or wipes to become a hazardous waste. A hazardous waste determination must be made on used brake pads, clutch pads and wipes. If any of these items are deemed to be a hazardous waste, they must be managed under the hazardous waste rules. DWM does not automatically require that all the dust and debris from brake and clutch work be managed as though it contains asbestos. A facility may use generator knowledge of the waste to determine whether or not it contains asbestos, or the waste may be tested to determine its asbestos content and then managed accordingly.

Asbestos-containing waste is regulated by the DWM as either a solid waste or a hazardous waste. Generally, the DWM considers asbestos-containing brake and clutch pads as a solid waste. However, the Division for Air Quality (DAQ) may have regulations regarding the disposal of asbestos-containing brake and clutch pads. Contact DAQ before disposing of them with regular trash.

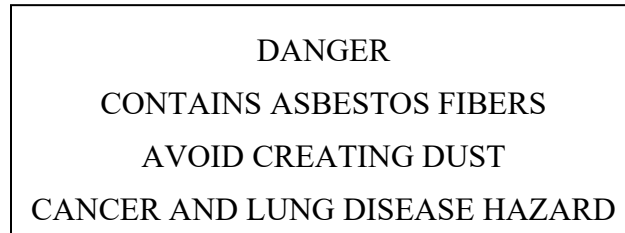
Used brake fluid is not inherently hazardous, but often contains additives and may be contaminated with hazardous solvents (e.g. brake cleaner). Any contamination may cause the fluid to be considered a hazardous waste. However, the EPA does not consider used brake fluid to be a hazardous waste when it is combined with used oil and recycled. Instead, the recycled used brake fluid should be treated as used oil and managed under used oil regulations.

## **What Must Be Done to Be in Compliance?**

Listed below are the requirements that must be met when storing and disposing of asbestos-containing waste:

## *Storage*

- Place bags of asbestos-containing waste in air-tight containers.
- Label the container with the following danger label (NOTE: The information may be handwritten on the container, or a facility may purchase pre-labeled bags designed for asbestos waste.):



- Store the container in an area that restricts access by unauthorized persons, such as a locked container, room, truck or trailer.

## *Disposal*

- Make a waste determination (either solid or hazardous waste) and manage accordingly. A facility may dispose of the waste as a solid waste if it has made a waste determination that the waste is not hazardous. If the material is a hazardous waste, it must be managed under the hazardous waste rules.
- Prior to shipping the asbestos-containing material as a solid waste, the container at a minimum must include the facility name, address and telephone number. Additional labeling may be required by either/both DWM and Kentucky Transportation Cabinet (KYTC).
- Have asbestos-containing waste sent to a landfill approved by the DWM to accept solid waste.
- Provide the receiving landfill with sufficient notice prior to sending asbestos-containing waste.
- Ensure that an Asbestos Waste Shipment/Disposal Record accompanies each load of asbestos-containing waste that is sent for disposal.
- If a completed copy of the Asbestos Waste Shipment/Disposal Record is not received from the waste disposal facility within 35 days of acceptance of the waste by the transporter, a facility must contact the transporter and/or the waste disposal facility to determine the status of the asbestos-containing waste that was sent for disposal. If the transporter and/or the waste disposal facility do not respond to the inquiry within 10 days,

a facility must file a written exception report with DAQ's Asbestos Section. This report must include a copy of the shipment/disposal record, a letter explaining the actions taken to locate the shipment and the results of these actions. For additional information on the proper handling and disposal of asbestos, visit the DWM's Hazardous Waste Branch website at <https://eec.ky.gov/Environmental-Protection/Air/asbestos/Pages/default.aspx>

## ***Catalytic Converters (and Emission Control Devices)***

Tampering with emission control devices (such as catalytic converters, exhaust gas recirculation valves, air pumps, etc.) is illegal unless the vehicle is used as a parts car.

### **What Must Be Done to Be in Compliance?**

Listed below are requirements for legally managing or removing catalytic converters:

- Do not tamper with catalytic converters or any part of the vehicle's emissions control equipment unless the vehicle is used for parts. Tampering includes activities such as
  - removing or making the emissions control inoperable,
  - adjusting emissions controls so they no longer meet manufacturer's specification,
  - installing a replacement part not specified for use in the vehicle or is not equally effective in reducing emissions as the specified replacement part or
  - adding a part that was not originally certified on the car.
- Do not rent, lease, sell or transfer a vehicle that has been subject to tampering unless the vehicle is to be used for parts.
- Do not operate a tampered vehicle.
- No release of waste onto the soil is to occur during removal and dismantling of catalytic converters.

**GOOD IDEA:** Send old catalytic converters to scrap metal recycling companies. Catalytic converters contain precious metals, such as platinum, palladium and rhodium

## ***Fluorescent Light Tubes and High-Intensity Discharge (HID) Lamps (not including halogen lamps)***

Historically, fluorescent tubes and lamps contained a sufficient amount of mercury that made them a hazardous waste when disposed. Some new tubes and lamps are marketed as containing

reduced amounts of mercury, presumably making them a nonhazardous waste when disposed. However, it remains the generator's responsibility to make the correct hazardous waste determination and manage the waste accordingly. Facilities considering purchasing the new type of tube/lamp marketed as nonhazardous waste when disposed, should request the analytical test results for the product (i.e., toxic characteristic leaching procedure, otherwise referred to as TCLP) from the vendor. Ask the vendor to explain the TCLP results or contact the Division of Compliance Assistance (DCA) at 502-782-6189.

If the used tubes/lamps are considered to be a hazardous waste, there are two management options for handling waste tubes and lamps:

- Dispose of them under the hazardous waste rules.
- Recycle or dispose of them under the Universal Waste Rule.

### **What Must Be Done to Be in Compliance?**

If used tubes and lamps are managed under the Universal Waste Rule, a facility must:

- Package unbroken tubes/lamps to prevent breakage and a release of contaminants; lamps managed under the Universal Waste Rule may not be intentionally crushed or broken.
- Label the tubes/lamps or the containers holding them with the words "Universal Waste lamps" or "Waste Lamps" or "Used Lamps" or any other words that accurately identify the universal waste lamps.
- Have used tubes and lamps transported to a universal waste collection center or directly to their final destination.

**NOTE:** Under the Universal Waste Rule, it is not required to manifest used tubes/lamps.

- Not accumulate and store used tubes/lamps for longer than a one-year period.

### ***Fuel and Fuel Filters***

Because both waste gasoline and diesel fuel are flammable, they are classified as a hazardous waste if sent for disposal. In most cases, it will need to be managed according to hazardous waste rules. Waste fuel is not considered a hazardous waste if it is reused or recycled. Fuel filters contaminated with gasoline or diesel may be subject to DWM's requirements.

### **What Must Be Done to Be in Compliance?**

Listed below are the management responsibilities that must be followed when managing fuel and fuel filters:

- Reusable fuel may be used in facility or employee vehicles. It should be stored in appropriate containers before reuse and be clearly labeled as “Reusable Gasoline” or “Reusable Diesel.”
- Manage waste fuel in one of the following manners:
  - Reuse the fuel if it is not contaminated.
    - Mix two (2) parts new fuel to one (1) part old fuel
  - Send to a re-refiner or fuel blender.
  - Make a hazardous waste determination and manage accordingly.
- Make a hazardous waste determination on fuel filters that contain gasoline or drain the residual fuel from the filter collecting any liquid for reclamation or reuse.

### ***Storage***

- Store in containers that meet Department of Transportation (DOT) specifications’ performance criteria and are in good condition. This means no
  - severe rusting,
  - bulging or major dents and
  - visible leaks.
- Waste fuel storage containers must be located within your property limits, at least 50 feet from your property boundaries.
- Do not accumulate waste fuel on-site for longer than 180 days.
- Do not mix waste fuel with any other waste streams without written permission from your waste hauler.

### ***Mercury***

A significant number of motor vehicles manufactured before 2003 contain mercury. There are various sources of mercury in automobiles, including:

- Light switches (e.g. tilt switches used on underhood and truck lighting),
- Anti-lock braking systems,
- Active ride control or ride leveling sensors,

- High-intensity discharge systems (headlights, tail lamps),
- Virtual image instrument panels and
- Thermostats.

Mercury is difficult and expensive to remove at the shredder and steel mill, so mercury-containing components should be removed and recycled prior to storage, disposal or crushing. Unusable parts that are removed and contain mercury cannot be disposed of in landfills. Thermostats may be classified as universal waste and managed as such instead of hazardous waste. Please see the earlier chapter entitled "[Universal Waste](#)" for more details.

Motor vehicle manufacturers who produced vehicles with mercury switches have formed End-of-Life Vehicle Solutions (ELVS), a corporation whose purpose is to run a nationwide program to remove these mercury switches. ELVS has developed a Mercury Minimization Plan to remove mercury switches. ELVS is responsible for providing motor vehicle recyclers with educational materials, containers for storing and shipping switches, recycling services at mercury retorters and tracking recycled switches. The educational materials provided by ELVS will show which vehicles have mercury switches, where they are located and how to safely remove, store and ship them to the mercury recycler.

Motor vehicle recyclers include automobile salvage recyclers, automobile scrap yards, bulk crushers, scrap metal processors and vehicle disposal facilities.

If you are a motor vehicle recycler, contact DWM's Recycling and Local Assistance Branch for additional information, regulations and requirements for recycling mercury switches in Kentucky at 502-564-6716.

### **What Must Be Done to Be in Compliance?**

- Remove any mercury-containing parts from a vehicle prior to crushing, shredding or smelting for recycling.
- Thermostats may be managed as universal waste.
- Unusable parts must be managed as a hazardous waste.

### ***Oil (Used)***

Used oil includes any petroleum-based or synthetic oil that has been used, such as engine oil, filter solids from used oil tanks, transmission fluid, refrigeration oil, compressor oil, hydraulic fluid, etc. Used oil does NOT include antifreeze, kerosene, vegetable and animal oils and petroleum distillates.

Two environmental management options currently exist for auto salvage facilities that generate used oil.

The first option is to recycle used oil or burn it for energy recovery under the Used Oil Regulation. The second option is to dispose of used oil, following all applicable solid and hazardous waste rules. By managing used oil under the Used Oil Regulation (rather than under the solid and hazardous waste rules), the regulatory requirements will be lessened.

### **Option 1: Used Oil Regulation (Recycling or Burning for Energy Recovery)**

Complying with the Used Oil Regulation means that a facility does not have to manage used oil or the sludge from used oil tank as a hazardous waste. In order to comply with the Used Oil Regulation, a facility must properly manage its used oil (i.e., don't mix anything other than waste fuels with used oil), and must either recycle used oil or burn it for energy recovery. Keep in mind that oil that is intentionally or accidentally mixed with a hazardous waste must be managed as a hazardous waste.

**NOTE:** Under the Used Oil Regulation, both re-refining and burning of used oil for energy recovery are considered to be forms of recycling. Re-refining is the preferred method of managing used oil because it preserves our limited resources. However, in some instances, such as when a facility is disposing of settled solids from the bottom of a used oil tank, or disposing of petroleum-contaminated wipes, sorbents or spill materials, burning the material for energy recovery is the better management option.

If a facility chooses to burn used oil in a used oil furnace, be aware that there may be additional regulations that must be followed in addition to the Used Oil Regulation. Always check with DAQ or DCA for additional permitting requirements before using a used oil furnace. Because small oil-burning furnaces are not as clean burning or as efficient as industrial furnaces, DWM recommends that used oil be sent to a fuel blender rather than burning it on-site.

### **Option 2: Solid and Hazardous Waste Rules (Disposal)**

Used oil that cannot be managed under the Used Oil Regulation (i.e., because of contamination with a hazardous waste or other material) is subject to all applicable solid and hazardous waste rules. Under the solid and hazardous waste rules, a facility must make a hazardous waste determination and manage used oil accordingly.

If a facility determines that its used oil is not a hazardous waste, it is still prohibited from being sent to a solid waste landfill because these landfills do not accept liquid waste or waste that contains free liquids (i.e., wastes containing liquids that will readily pour). Therefore, used oil must be sent to a facility that is capable of handling liquid waste or can solidify the waste prior to disposal.

## What Must Be Done to Be in Compliance?

Managing used oil may be done in a number of different ways. Listed below are the various options, as well as the requirements for each.

- If the Used Oil Regulation is being followed, a facility must:
  - Recycle used oil or burn it for energy recovery in an authorized device.
  - Not mix used oil with hazardous wastes.
  - Determine the halogen content of the used oil by using generator knowledge or using a test kit for halogens (available from safety supply dealers). If the used oil contains more than 1,000 parts per million total halogens, it is presumed to have been mixed with a hazardous waste and must be treated as a hazardous waste unless a facility can demonstrate that the source of the halogens was not from mixing a hazardous waste with used oil. To avoid having to manage used oil as a hazardous waste, do not add solvents or anything else to the used oil.
  - For off-site shipments, a facility must ensure that the transporter used has an EPA identification number. A facility may personally transport less than 55 gallons of its own used oil (or oil that has been collected through a household do-it-yourself collection program such as that described below) at any time to a used oil collection center or to a facility's own aggregation point without obtaining an EPA ID number.

**NOTE:** An aggregation point is a collection center designed to accept small amounts of used oil and store it until enough is collected to ship it elsewhere for recycling. Aggregation points collect oil only from facilities run by the same owner/operator and from individuals.

- Facilities following the Used Oil Rule and Burning Used Oil On-Site, must:
  - Follow all of the above-listed requirements.
  - Have a used oil-fired space heater with a maximum capacity of not more than 500,000 Btu/hr.
  - Vent combustion gases from the heater to the ambient air.
  - Burn only used oil that a facility generates or used oil received from households that bring their used oil to the facility.
- Facilities following the Solid and Hazardous Waste Rules must:
  - Determine if used oil is a hazardous waste. If the oil is considered to be a hazardous waste, it must be managed according to the hazardous waste rules.



- If used oil is not a hazardous waste, it still must be managed under DWM's solid waste rules and sent to a facility that is permitted to accept this type of waste.

Regardless of whether a facility follows the Used Oil Regulation or the Solid and Hazardous Waste Regulations, it must:

- Clean up spills promptly.
- Keep oil storage containers in good condition. Drums used to store oil cannot be rusting or leaking.
- Develop a Spill Prevention, Control and Countermeasures Plan if a facility stores oil in tanks greater than 660 gallons or have a cumulative storage capacity in excess of 1,320 gallons.
- Report oil spills (see chapter on spill reporting for additional information).
- Not apply used oil as a dust suppressant.
- Not store used oil in surface impoundments (i.e., lagoons).

### ***Biennial Used Oil Management Report***

Kentucky waste regulation requires used oil processors or re-refiners to submit a report in the form of a letter, every other year, which describes their used oil activities for the preceding year. This report is due on March 1 of every even-numbered year for the activities conducted during the previous odd-numbered year. Information required in the report (letter) can be found at 40 CFR 279.57(b).

### **GOOD IDEA: Starting a Do-It-Yourself (DIY) Oil Collection Program**

The U.S. Environmental Protection Agency (EPA) estimates that millions of gallons of used oil are released into the environment each year by household do-it-yourselfers. By participating in a do-it-yourself (DIY) oil collection program, a facility can help prevent oil waste from polluting the environment and also demonstrate a facility's commitment to customer service and community.

Prior to starting a DIY collection program, a facility must contact DWM to ensure it is following applicable regulations. A facility must follow the management standards of Kentucky's Used Oil Regulation, accept DIY used oil and send the DIY oil to a recycler or burn it for energy recovery.

Many used oil transporters will pick up used oil, including used oil that is collected from DIY, at no charge if a minimum of 200 gallons of used oil is present per pick-up. Some used oil transporters will provide a double-walled oil storage tank and train staff in the proper collection of DIY used oil. Contact a used oil transporter to request additional information about participating in a DIY oil collection program.

Some suggestions for implementing a used oil-recycling program include the following:

- Offer special reusable containers to do-it-yourselfers. Avoid accepting other used oil containers.
- Use a separate drum or tank for do-it-yourselfer oil to avoid potential contamination of your own used oil.
- Visually inspect used oil brought in by do-it-yourselfers. Do not accept suspicious materials.
- Have the do-it-yourselfers sign a log with a statement verifying the material is used oil only.
- Post a sign and provide written materials describing the program.
- Include this public service and any other environmental efforts in the advertisements.

## ***Oil Filters (Used)***

When a used oil filter is removed from a vehicle, approximately one pint of oil may remain trapped in the filter. The used oil and sludge that remain in the filter may contain contaminants such as heavy metals that are picked up as the oil circulates through the engine. High concentrations of heavy metals may cause used filters to demonstrate hazardous waste characteristics, making the filters subject to hazardous waste regulations if the filters are not properly drained. (See the later chapter, "[Complying with the Hazardous Waste Rules](#)," for additional information about hazardous waste characteristics.)

There are several management options for handling used oil filters. The regulations must be followed depending on whether a facility properly drains its used filters and what is subsequently done with them (e.g., recycle, burn, discard).

Properly hot-drained filters are exempt from Kentucky's hazardous waste regulations and may be disposed as solid waste. The term hot-drain means to immediately drain the filter after it is removed from a vehicle that is at or near the engine's operating temperature, while employing some additional means to facilitate draining, such as puncturing, crushing or dismantling. Undrained filters may be managed under Kentucky's Used Oil Regulation if the filters are recycled or burned for energy recovery. (See "[Oil \(Used\)](#)" within this chapter for additional information on Kentucky's Used Oil Regulation).

Undrained filters that are discarded are subject to all applicable solid and hazardous waste rules.

**NOTE:** Even if a facility's used oil filters are not considered a hazardous waste, they still cannot be sent to a landfill because of the restrictions on wastes containing free liquids (liquids that will readily pour). Instead, the filters must be managed under Kentucky's solid waste rules and sent to a facility that is capable of handling liquid waste or that can solidify the waste prior to disposal.

Large filters, such as those used in heavy-duty vehicles, are likely to be terne-plated. Terne is an alloy of tin and lead, and is used to strengthen the shells of larger oil filters. Non-terne plated filters that are properly hot drained prior to disposal are exempt from the hazardous waste rules. Terne-plated filters do not share the same exemption from the hazardous waste rules when disposed. Terne-plated filters are exempt from hazardous waste rules only if they are recycled as a scrap metal. If they are to be disposed, they are subject to a hazardous waste determination and, if found hazardous, must be managed in accordance with all applicable hazardous waste requirements.

### **Regulations for Regular (Non-Terne-Plated) Used Oil Filters**

<b>Management Option</b>	<b>Applicable Regulation</b>
Properly Hot-Drained	Exempt from Hazardous Waste Regulations
Recycled	Used Oil Regulations
Burned for Energy Recovery	Used Oil Regulations
Discarded	Solid and Hazardous Waste Regulations

## What Must Be Done to Be in Compliance?

As stated above, managing used oil filters may be done in a number of different ways. If a facility chooses to hot drain its used oil filters, it must:

- puncture the filter anti-drain back valve or the filter dome end and hot-drain the filters.;  
or
- perform any other equivalent hot-draining method that will remove the used oil so that the filters contain no free liquids. Equivalent methods include crushing or dismantling the filters;
- and it must properly manage the oil drained from the filters (see the previous “Oil–Used” chapter for more information).

Filters not hot-drained must be either recycled in accordance with the Used Oil Regulation or disposed of accordingly if the filters demonstrate hazardous waste characteristics. In summary,

- If a facility plans to recycle undrained filters follow the Used Oil Rules, see the “Oil – Used” chapter.

Filters that demonstrate hazardous waste characteristics are considered to be a hazardous waste and must be managed accordingly.

- Manage terne-plated filters as a hazardous waste, unless they are properly hot-drained and recycled.

**NOTE:** All properly drained filters recycled as scrap metal are exempt from hazardous waste regulations.

**GOOD IDEA:** Crushing used oil filters is the most effective way to remove any remaining oil. Crushing also allows more filters into each drum, and since many service companies charge by the drum (rather than the weight of the drum or number of filters in the drum), the facility can reduce the transportation and/or disposal costs associated with used oil filters.

A facility may either purchase equipment to crush the filters, or it may send the filters to a service company to have them crushed and then sent to a recycler.

## ***Refrigerants/Motor Vehicle Air-Conditioning Service***

Motor vehicle air-conditioning systems have historically used the refrigerant CFC-12, also known as Freon or R-12. R-12 is a chlorofluorocarbon (CFC) that has been identified as causing damage to the ozone layer, which protects the earth from harmful ultraviolet radiation. A new

refrigerant called HFC-134a, also known as R-134a, is being used in all new vehicles. R-134a is a hydrofluorocarbon (HFC), which is less harmful to the stratospheric ozone layer. Refrigerant blends are a mixture of several chemicals and designed to emulate the characteristics of R-12. Blends, such as R 22, R 142b and R 124, contain ozone-depleting hydrochlorofluorocarbons (HCFC).

When refrigerant blends are mixed with R-134a or R-12, the resulting mixtures cannot be recycled. Similarly, whenever R-12 is contaminated with another refrigerant, not only can the mixture not be recycled; it must be managed as a hazardous waste. Because blends should not be mixed with R-134a or R-12, a separate recovery machine is needed specifically for blends. Additionally, identifying and recovering blended refrigerants is more difficult than working with straight R-12 or R-134a. Refrigerants in customers' motor vehicle air conditioning (MVAC) systems should be tested prior to removal (use a refrigerant diagnostic tool) to determine if the system contains a specific blend or a mystery mixture of refrigerants. Recovery machines should be checked to ensure they can be used to recover the specific type refrigerant that will be recovered. Recovering incompatible refrigerants into a recovery machine could cause damage to the machine.

The 1990 Clean Air Act Amendments required the phase out of CFC-based refrigerants used in MVAC systems, and stopped the production and importation of CFCs in 1995. The EPA regulates MVAC refrigerants and requires that they be either recycled on-site or sent to an EPA-certified reclaimer. Facilities removing refrigerants from MVACs must use EPA-approved recovery or recovery/recycling equipment and have their technicians trained by an EPA-accredited training program. Kentucky regulates contaminated R-12 refrigerant mixtures as a hazardous waste.

## **What Must Be Done to Be in Compliance?**

The facility manager or owner can ensure the facility's compliance with EPA regulations by adhering to the following requirements.

- Never intentionally vent refrigerants to the atmosphere.
- Recover all refrigerants used in MVAC systems prior to beginning work on the system.
- Have all MVAC technicians trained and certified by an EPA-accredited training program in the proper use of refrigerant recovery/recycling equipment.
- Use only EPA-approved recovery or recovery/recycling equipment to handle refrigerants.
- Submit an MVAC equipment owner certification form to the EPA prior to commencing MVAC service operations (Only one certification is required regardless of the number of units that the facility has.).

- Either recycle R-12 on-site or sell/give recovered R-12 to an EPA-certified refrigerant reclaimer. If the R-12 is sent to a reclaimer, the facility must retain the name and address of the reclaimer.
- Maintain the following records and certification forms on-site:
  - EPA equipment owner certification forms for at least one of piece of recovery or recovery/recycling machinery and
  - Certification forms for each trained technician and facility operator.
- Do not top off a leaking MVAC system with a refrigerant other than what is currently present in the system.
- Extract the old refrigerant from an MVAC system prior to charging the system with a new type of refrigerant.
- Handle R-12 that has been mixed with other refrigerants as a hazardous waste.
- Properly manage compressor oil recovered from MVAC systems.

Dealing with blended refrigerants and mystery mixtures requires some specialized management procedures.

- Use only EPA-approved recovery equipment, and dedicate this equipment specifically to blends and mystery mixtures.
- Recover refrigerants with new or used equipment, and manage it in one of the following manners:
  - A facility may dedicate a piece of equipment (i.e., that was formerly used to recover uncontaminated CFC-12 or HFC-134a) to recover blends as well as contaminated CFC-12 or HFC-134a. However, once a facility chooses to dedicate this equipment to recovering blends and contaminated mixtures, it may no longer use this equipment to recover uncontaminated CFC-12 or HFC-134a. Additionally, a facility must ship the refrigerants recovered from this equipment to a reclaimer or off-site for destruction (not allowed to be recycled on-site.)
  - A facility may recover a blend refrigerant using a new piece of EPA-approved equipment designed to recover, but not recycle, any single specific blend refrigerant.

**GOOD IDEA:** A facility may obtain a variety of information, including the EPA equipment certification form, a listing of organizations with EPA-accredited training programs and EPA-approved third-party refrigerant reclaimers by calling the Stratospheric Ozone Hotline at 800-296-1996.

A facility may also obtain information from the EPA's auto air conditioning website at <https://www.epa.gov/mvac>

## **Solvents**

The regulations a facility must follow when managing and disposing of solvents depends on the type(s) of solvent and pre-cleaner(s) used. Listed below are the types of solvents potentially used by auto salvage facilities and an overview of the regulations associated with each. Refer to the sections that follow this introduction, Aqueous-Based Solvents, Chlorinated Solvents and Petroleum-Based Solvents, for more information on each type of solvent.

### **Aqueous (water)-Based Solvents**

Aqueous-based solvents are generally less toxic alternatives to petroleum-based solvents. Unlike petroleum-based solvents, there are generally no hazards or adverse health or environmental impacts associated with the detergent and water solution found in aqueous-based solvents. The detergent used for aqueous parts washing may be an acid, alkaline or a citrus-based solution. Some aqueous systems use microbes to eat the oil and grease that accumulate in the cleaning system.

Aqueous parts washers may be a heated-parts washing sink, an immersion tank or high-temperature spray cabinet is similar to a large dishwasher in that it combines heat, soap and spraying action to clean dirty parts. This type of unit is available in various sizes, with the larger units having ample capacity for cleaning large parts.

If a facility is considering switching to an aqueous-based cleaner, be aware that some aqueous cleaners will cause the parts to rust, requiring that the parts be treated after they are cleaned. Also used aqueous-based solvents may be a toxic hazardous waste if they are contaminated to the extent that they exhibit hazardous waste characteristics or are contaminated with a listed hazardous waste. Potential contaminants include oil, grease, lead, chromium, cadmium and any precleaners used by the facility.

Depending upon the type and level of contamination, a facility's used solvent may be unacceptable for discharge to the local Publicly Owned Treatment Works (POTW) or may be a hazardous waste.

**NOTE:** If a facility wishes to discharge its aqueous cleaning solution, the facility's drain should be connected to a POTW. For information on discharging used solvent to a (POTW), see the chapter titled, "Notifications and Permitting." For information on making a hazardous waste

determination and managing hazardous waste, see the earlier chapter titled, “Comply with the Hazardous Waste Rules.”

## What Must Be Done to Be in Compliance?

Listed below are the requirements that a facility must follow when managing and disposing of aqueous-based solvents.

- Make a hazardous waste determination and manage used aqueous solution accordingly. For additional information on listed and characteristic hazardous wastes and the method to be used for making waste determinations, refer to the chapter entitled, “[Complying with the Hazardous Waste Rules.](#)”
- Do not discharge used aqueous solution unless it is connected to a POTW or a holding tank or unless the facility has a Kentucky Pollutant Discharge Elimination System (KPDES) permit, see the chapter titled, “Notifications and Permitting” for information on KPDES permits. If a facility is discharging to a POTW, the facility must ensure that the discharge meets the effluent limits set by the POTW. See the Wastewater section for more information.

**GOOD IDEA:** Purchasing an aqueous parts washer with a skimmer and timer will provide the facility with several benefits. First, the timer will allow it to automatically turn the washer’s heater unit on and off at certain times each day. Turning the heat off at the end of each day not only saves energy, but also allows the aqueous solvent to cool and the oil and grease to separate. The timer can then schedule the skimmer to remove the oil and grease that have risen to the top of the solvent. Frequent skimming will keep the solvent at its peak operating efficiency. Finally, the timer can be set to automatically turn the heater unit back on so that the solvent is ready to use at the beginning of each work day.

## Chlorinated Solvents

Using chlorinated solvents can lead to significant compliance work for a facility. Chlorinated solvents include the following:

- chlorobenzene (monochlorobenzene or benzene chloride)
- trichloroethylene (trichloroethane, ethinyl trichloride)
- chlorinated fluorocarbons
- methylene chloride (dichloromethane, methylene dichloride, methylene bichloride)
- tetrachloroethylene (perchloroethylene, ethylene tetrachloride)
- 1,1,1-trichloroethane (methyl chloroform, chloroethene)



Check the product label or the MSDS sheets for these chemicals. If a facility is using any of them, Kentucky air quality regulations will apply. Hazardous waste regulations may also apply.

## **Petroleum-Based Solvents (Mineral Spirits)**

Some facilities use supplemental cleaning products to pretreat carbon and other heavy deposits. These cleaning products typically contain ignitable and/or chlorinated solvents, such as methanol, propane, xylene, methylene chloride, trichloroethane and/or tetrachloroethylene. Using these products may make the used solvent a hazardous waste due to toxicity, as well as ignitability.

In addition to precleaners, used solvent may be contaminated with lead and/or chromium, which are frequently used as coatings on metal parts. A thin layer of these coatings may wash off when the parts are cleaned, leaving heavy metals in the used solvent.

Under Kentucky's air quality regulations, all facilities that use petroleum-based solvents in an immersion cleaning machine (solvent sink) or in a remote reservoir cleaning machine (part sprayer), must follow specific work practices to limit the amount of volatile organic compounds (VOCs) entering the air. These work practices are listed in the "What Must I Do to Be in Compliance" section below.

New/virgin petroleum-based solvents are classified according to their flash point. The term flash point refers to the temperature at which a material could ignite if exposed to a spark. Materials with a low flash point (100-140°F) will ignite more easily than materials with a higher flash point (140-200°F).

### ***Low-Flash Solvents (100–140°F)***

Under Kentucky's hazardous waste rules, a used petroleum-based solvent with a flash point below 140°F is a hazardous waste due to the characteristic of ignitability. The term flash point refers to the temperature at which a material could ignite if exposed to a spark.

Petroleum-based solvents with a flash point from 140–200°F are also referred to as high-flash solvents. A used high-flash solvent is not considered to be an ignitable hazardous waste unless it is contaminated and its flash point drops below 140°F.

Be aware that many high-flash solvents have a flash point that is only slightly above the 140°F threshold for this group of solvents. If the facility uses precleaners that contain flammable materials, the used high-flash solvent may become a low-flash solvent (i.e., an ignitable hazardous waste) that is subject to more stringent regulations. In addition to potentially being an ignitable hazardous waste, a used high-flash solvent may also be a toxic hazardous waste if contaminated to the extent that it exhibits hazardous waste characteristics. Waste solvents generated from the use of precleaners that are listed wastes should be kept segregated from other solvents. If listed waste solvents are mixed with otherwise nonhazardous solvents, the entire mixture becomes a hazardous waste.

## What Must Be Done to Be in Compliance?

Listed below are the requirements that must be followed when managing and disposing of petroleum-based solvents.

- If a facility uses petroleum-based solvents in immersion cleaning machines (solvent sinks) or in a remote reservoir cleaning machine (part sprayer), it must:
  - keep the solvent tank covered when not in use to prevent evaporation.
  - place a drain shelf in the basin of the parts washer. This shelf allows solvent to drain back into the solvent tank.
  - drain all parts for at least 15 (fifteen) seconds or until the part is no longer dripping.
  - store used solvent to be disposed in tightly covered or closed containers.
- Users of solvents with a vapor pressure at or below two millimeters of mercury (2.0 mm Hg) must also keep a record of each purchase, including the following information:
  - name and address of the solvent supplier,
  - date of purchase, the type of solvent,
  - volume of each unit,
  - total volume of the solvent and
  - vapor pressure of the solvent.
- Make a hazardous waste determination on used petroleum-based solvent and manage it accordingly.

### **GOOD IDEA: Purchasing or Leasing a Solvent Sink with a Filter Unit**

Some of the newer solvent sinks have filter units that extend the life of the solvent by filtering out contaminants. Dirty solvent passes through the filtering unit where contaminants are removed, and clean solvent is returned to the reservoir for reuse.

The type and location of the filters on the solvent sink vary depending upon the type of filtration system used. Some of the more commonly employed filtration systems are

- Side-mounted disposable fabric filter units, which remove primarily particulate.
- Cyclonic filter units that use centrifugal force cyclonic action to remove solids. The solvent passes through a filtering unit where a spinning action takes place, causing the solids to settle out and allowing the clean solvent to be reused.
- Clay-containing filter units that are placed in the solvent reservoir or in the wash basin to remove primarily oil and grease.

*Remember that a hazardous waste determination must be performed on the used filters prior to disposal.*

### **Other Solvents Used by Facilities**

Additionally, any new or existing facility with cleaning solvent operations commencing operation on or after June 29, 1979, is required to do the following:

- Equip the cleaner with a cover.
- Equip the cleaner with a facility for draining cleaned parts.
- Close the degreaser cover whenever parts are not being handled in the cleaner.
- Drain the cleaned parts for at least 15 seconds or until dripping ceases.
- Provide a permanent, conspicuous label summarizing the operation requirements.
- Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than 20% of the waste solvent (by weight) can evaporate into the atmosphere.
- The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure that does not cause excessive splashing.
- Equip the degreaser with one of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals, (32 millimeters of mercury or six-

tenths (0.6) pounds per square inch) measured at 38°C, 100°F or if the solvent is heated to a temperature greater than 48.9°C (120°F):

- A freeboard that attains a freeboard ratio of seventy-tenths (0.7) or greater.
- A water cover when solvent is used is insoluble in, and heavier than, water.
- Other systems of demonstrated equivalent control, such as a refrigerated chiller or carbon adsorption.

### ***Sorbents (includes spill cleanup materials and waste)***

A facility's used sorbents and spill waste must be managed in one of the ways listed below. The particular requirement that must be followed depends on the type and extent of contamination, quantity of contaminated sorbents generated per month and whether the sorbents are recycled or disposed.

**NOTE:** The term spill waste includes sorbents, as well as any contaminated soil, residue, debris and articles from the cleanup of a spill or release of petroleum-contaminated materials. The term petroleum-contaminated materials includes spill waste that contains virgin or used petroleum, such as gasoline, diesel fuel, hydraulic fuel, crude or refined oils that do not contain polychlorinated biphenyls (PCBs), kerosene and heating oils.

- Recycling Petroleum-Contaminated Sorbents (and/or Spill Waste) intended to be burned for energy recovery must first be approved by the DAQ. If a facility's sorbents are contaminated with used oil or with a mixture of oil and other fuels, the sorbents may be burned for energy recovery under the direction and permitting approval of DAQ. In order to be compliant, a facility must properly manage its oil-contaminated sorbents (i.e., don't mix other wastes with these sorbents), and it must either recycle sorbents or burn them for energy recovery in an approved apparatus. Check with the DAQ or DCA for additional information regarding recycling petroleum-contained sorbents.
- Disposing of Contaminated Sorbents (and/or Spill Waste). If a facility cannot manage its sorbents and spill waste as recycled material described above (e.g., because of contamination with a waste other than used oil or fuels), it must make a hazardous waste determination and manage them accordingly. Sorbents that exhibit hazardous waste characteristics or are contaminated with a listed hazardous waste must be managed as a hazardous waste. Refer to the chapter entitled, "[Complying with the Hazardous Waste Rules](#)" for additional information on characteristic and listed hazardous wastes.
- Disposing of Sorbents and/or Spill Waste as a Solid Waste (i.e., with regular trash). If used sorbents are not determined to be a hazardous waste, and they do not drip or accumulate free liquids (such as in the bottom of their storage container), then the facility should check with the local solid waste authority or the DWM for approval before disposing any sorbents with the facility's regular trash.

**NOTE:** Materials containing free liquids are prohibited from landfills.

## **What Must Be Done to Be in Compliance?**

Listed below are the requirements that must be followed when managing and disposing of sorbents.

- If a facility manages its petroleum-contaminated sorbents and spill waste under the Used Oil Regulation, it must follow the requirements of this rule.
- If a facility cannot manage its used sorbents and/or spill waste under the Used Oil Regulation due to contamination with a waste other than used oil or fuels, it must make a hazardous waste determination on its used sorbents. If they are a hazardous waste, the facility must manage them accordingly.
- If a facility's used sorbents or spill waste are not a hazardous waste, it must ensure that the material does not drip, contain free liquids or result in the accumulation of free liquids (such as in the bottom of a storage container) prior to disposing of them with the regular trash.

**Remember:** Regardless of how a facility manages its contaminated sorbents and/or spill waste, it must not air dry contaminated sorbents to remove ignitable or toxic characteristics prior to disposal!

### **GOOD IDEA: Purchasing Biomass-Derived Sorbent Material**

Sorbents made from plant cellulose, such as cotton and wood fibers, are very effective in absorbing liquids. Biomass-derived sorbents have an absorbency ratio of 4:1 when compared to most alternatives. The absorbency ratio is five times greater than clay.

## **Waste Tires**

When improperly managed, tires accumulate rainwater, becoming a breeding ground for mosquitoes that can spread disease. A second concern with tires stored in piles is that they represent a serious fire hazard producing toxic smoke and intense heat. In addition, further environmental impact can occur if water applied to tire fires enters the ground and surface water via contaminated run-off.

Kentucky has established a waste tire law that requires tire processors, transporters and accumulators to register with DWM and post a bond. The law also establishes management standards for waste tires to reduce the risk of fire and prevent water entrapment and mosquito infestations.

Waste tires are defined as tires not used for their originally intended purpose because of wear or damage, used tires stored for resale and processed waste tire material.

An automotive recycling dealer licensed with the Kentucky Transportation Cabinet may accumulate up to 1,000 waste tires without registering as an accumulator. The waste tires must be stored in accordance with applicable laws, and stored on-site in a building in an adjacent covered area or closed container where public access is prohibited after business hours. Facilities may transport up to 50 waste tires at a time without registering as a transporter if the waste tires remain in their possession until they reach their destination.

## What Must Be Done to Be in Compliance?

Records must be kept for every tire from the time it becomes waste to the time it is disposed of or recycled. Auto salvage operators must obtain a receipt from the person the waste tires are transferred to. The law requires a facility to maintain this record for three (3) years and make the file available for review by DWM. The manifest or receipt must contain the following information:

- name, address, company and signature of the person accepting the tires;
- number of waste tires or the passenger tire equivalents accepted;
- date the waste tires were transferred; and
- name and address of the retailer transferring the waste tires.

Remember that as the generator of waste tires, a facility is ultimately liable if it uses an unregistered transporter that fails to transport tires to an appropriate processor, storage facility or final disposal facility. Accumulations of more than 1,000 waste tires are only permitted at Kentucky registered waste tire accumulator sites complying with storage requirement rules. View the current list of registered waste tire transporters, which is available on the DWM Recycling and Local Assistance Branch site at <https://eec.ky.gov/Environmental-Protection/Waste/recycling-and-local-assistance/waste-tires/Pages/default.aspx> and click on Waste Tire Transporters, Accumulators and Processors.

Facilities that store waste tires on-site must meet the following requirements:

- Accumulate **no more than** 1,000 waste tires.
- Manage the waste tires in accordance with environmental performance standards established by DWM for waste sites or facilities.
- Store the waste tires in a manner that allows firefighting equipment access to the waste tires.
- Establish fire breaks to prevent the spread of fire.
- Prevent mosquito infestations and entrapment of water in the waste tires.

- Store waste tires that are kept outdoors in closed containers, in adjacent covered areas or in windrows no greater than 25 feet wide, 10 feet high, and 75 feet long, with at least 50 feet of open, unoccupied ground between windrows.
- Unless the waste tires are stored in buildings, in adjacent covered areas, or in closed containers, store them no closer than:
  - 30 feet from a utility easement, property line or highway right-of-way;
  - 250 feet from a residence; or
  - 250 feet from a karst feature, surface water of the Commonwealth or unplugged water well.
- Store waste tires on a surface with a grade of five percent or less, which is free of vegetation and other flammable materials.
- Display a permanent sign legible at 100 feet, which identifies the name, address and emergency telephone number of the person with the registration; hours of operation and EEC's emergency telephone number.
- Comply with recordkeeping requirements.
- Transfer waste tires only to a person who presents a letter from DWM approving a registration as a processor, transporter or accumulator of waste tires or a copy of a solid waste disposal facility permit.

Facilities generating waste tires must dispose of them properly by delivering them to one or more of the following:

- Wholesaler or an agent of a wholesaler (a retailer),
- Tire manufacturer,
- Tire recycler,
- Permitted final disposal facility regulated under DWM's waste regulations,
- Registered waste tire storage site,
- Registered tire processing facility or
- Registered waste tire transporter or person who operates a municipal waste collection and transportation vehicle.

Facilities that transport waste tires must follow these requirements:

- Waste tires must be transferred to a person presenting a letter from DWM approving that person's registration as a processor, transporter or accumulator of waste tires or a copy of a solid waste disposal facility permit.
- Obtain a receipt for the waste tires that includes the
  - Name, address, company and signature of the receiver;
  - Number of waste tires accepted;
  - Date waste tires were transferred and
  - Name and address of the transferor.
- Any receipts must be kept for a period of three (3) years.
- Waste tires may be transported to the following:
  - A registered person or business operating in Kentucky,
  - A contained landfill,
  - Another type of landfill, if tires are specifically listed as an acceptable waste stream on the permit,
  - Directly to an out-of-state disposal or energy resource facility.

Keep in mind that waste tires are regulated as solid waste. Whole tire disposal is banned at landfills, making it necessary to alter tires by shearing across the bead into four relatively equal pieces or by cutting away each side wall from the tread, resulting in three pieces. Shredded tires are also an acceptable disposal form for tires. Some landfills may require additional processing or may refuse to accept any tire material. Commercial operations collecting and processing waste tires must obtain a certificate of registration from the DWM Solid Waste Branch.

## **Wipes**

Wipes (industrial shop towels, rags, paper towels, gloves, cotton swabs, etc.) are not hazardous unless they come into contact with hazardous materials or hazardous wastes. As wipes are used to clean up spills and remove oils, they become contaminated with automotive fluids and cleaning solvents.

A facility must make a hazardous waste determination on its used disposable wipes (refer to the chapter entitled, "[Complying with the Hazardous Waste Rules](#)" for additional information on the processes used for making a waste determination). If the products used at the facility contain any



of the following constituents, then the disposable wipes, when contaminated, could exhibit hazardous characteristics and may be regulated as a hazardous waste by the DWM Hazardous Waste Branch.

- Heavy metals, such as arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver
- Chlorinated solvents, such as monochlorobenzene; 1,4- dichlorobenzene; 1,2- dichloroethane; 1,1-dichloroethylene; pentachlorophenol; methylene chloride; trichloroethane; trichloroethylene; tetrachloroethylene and any chlorinated fluorocarbons
- Toxic solvents, such as benzene, toluene, xylene, pyridine, 2-ethoxyethanol, methyl ethyl ketone and 2-nitropropane.

If the products used at the facility are a listed waste when discarded (i.e., contain a chemical or chemicals found on one of the hazardous waste lists), the contaminated wipes will automatically be a hazardous waste when disposed.

Laundered contaminated wipes are not regulated as a hazardous waste unless used to clean up spills of hazardous waste or unless a hazardous waste is added to the container of wipes. They are, however, still regulated by the DWM Solid Waste Branch and may be subject to permitting requirements by DAQ.

The EPA made a decision effective Jan. 31, 2014, that used solvent wipes sent for cleaning (reusable wipes) and disposal (disposable wipes) are not considered solid waste or hazardous waste, respectively.

The Commonwealth of Kentucky has not adopted this new ruling, but intends to do so. Until the change in regulation is formally adopted, facilities may request a variance (written waivers to follow the new EPA regulations) from the DWM Hazardous Waste Branch.

## **What Must Be Done to Be in Compliance?**

A facility can manage used wipes in a couple of different ways, depending upon the type of wipes that are used and the contaminant(s) that have been absorbed. Listed below are the requirements that must be followed when disposing of wipes.

### ***For laundered wipes***

- If a facility is sending reusable wipes to a laundry, it must:
  - Store contaminated wipes in closed containers to prevent the evaporation of any contaminants into the air.

- Ensure that storage containers are not accumulating free liquids in the bottom of the container. If the container has free liquids, transfer the free liquid into another container and manage by its hazardous classification. Laundries will not accept wipes containing free liquids.

***For disposable wipes***

- Make a hazardous waste determination on used wipes. If the wipes are a hazardous waste, they must be managed accordingly.
- Do not air dry contaminated wipes to remove ignitable or toxic characteristics prior to disposal.
- Store contaminated wipes in closed containers to prevent the evaporation of any contaminants into the air.
- If operating under the variance, send disposable contaminated wipes to a waste disposal company.

# COMPLYING WITH HAZARDOUS WASTE RULES

Depending upon which of the above potential waste streams are present at an auto salvage facility, it may be subject to Kentucky's hazardous waste rules. Determining which, if any, hazardous waste rules apply to a facility involves three steps. You must determine

1. Whether any hazardous waste is generated,
2. A facility's generator status and
3. Which regulations must be complied with depending upon a facility's generator status, and comply with those requirements.

In order for a facility to fully understand each of these steps, an explanation of each is provided below.

## ***Determine Whether Any Hazardous Waste Is Generated***

It is critical that this step is completed properly. If it is not, serious compliance problems could result due to the fact that a facility may then be out of compliance with Steps 2 and 3 listed above. Before a facility can determine whether it generates any hazardous waste, hazardous waste has to be defined. Worksheets 1 and 2 (page 54) and Tables 1 and 2 (pages 55 - 59) will assist in identifying and classifying the various waste streams generated at the facility.

### **What is hazardous waste?**

There are a few steps involved in determining whether any wastes generated by the facility are hazardous. A facility must first determine whether any solid wastes are generated. Since hazardous waste is a subset of solid waste, if no solid waste is generated, then no hazardous waste is generated.

The term solid waste can be somewhat misleading. The word solid does not refer to the physical state of the waste. Solid waste can be a solid, liquid or contained gas. Under the hazardous waste rules, generally, a solid waste is any material that will no longer be used for its original intended purpose or a material that must be reclaimed before reuse. A facility will need to look at each of the waste streams generated (e.g., antifreeze, used oil, solvents, etc.) and determine whether it is a solid waste.

**NOTE:** Not all solid wastes are considered hazardous wastes. Certain solid wastes, such as used oil destined for recycling, are excluded from the hazardous waste rules. If a facility finds that one or more wastes generated meet the definition of a solid waste, then a determination must be made to identify any hazardous wastes. Wastes can be hazardous if they are either listed or characteristic or if they are a mixture of a listed hazardous waste and other wastes.

## Listed wastes

Waste is considered hazardous if it is found on any one of four lists. These lists are called the F, K, P and U lists.

- **F list.** This list contains wastes from certain common industrial or manufacturing processes. Because the processes producing these wastes can occur in different sectors of industry, this list contains wastes that are from nonspecific sources (such as degreasing).
- **K list.** This list contains wastes from certain specific sectors of industry. These wastes come from specific sources.
- **P and U lists.** These contain discarded or unused commercial chemical products, off-specification products, container residues and spill residues of these products. The P list also includes unused pesticides.

## Characteristic wastes

Once a facility has reviewed the F, K, P and U lists and determined whether generated wastes are found on any of the lists, then a determination will need to be made to see if the remaining wastes are characteristic hazardous wastes. There are four different characteristics—ignitability, corrosivity, reactivity and toxicity.

- **Ignitable waste.** These wastes can readily catch fire and sustain combustion. Ignitable wastes are liquid and have a flash point of less than 140 degrees Fahrenheit. A waste is also considered ignitable if it is an oxidizer or an ignitable compressed gas (as defined by U.S. Department of Transportation regulations) or if it has the potential to ignite under standard temperature and pressure and burn persistently and vigorously once ignited. Examples of ignitable wastes include solvents, paint wastes and some degreasers. Ignitable wastes carry the hazardous waste code designation of D001.
- **Corrosive waste.** These are acidic or alkaline (basic) wastes that can readily corrode or dissolve flesh, metal or other materials. There are two criteria to use when identifying corrosive hazardous wastes. The first is a pH test. Wastes with a pH less than or equal to 2.0 or greater than or equal to 12.5 are corrosive. In addition, a waste may be corrosive if it has the ability to corrode steel at a rate of more than one-quarter inch (0.25 inches) per year under conditions specified in a particular EPA test. Examples of corrosive wastes include waste battery acid, waste acid or alkaline cleaning fluids and waste rust removers. Corrosive wastes carry the hazardous waste code designation of D002.
- **Reactive waste.** A waste is reactive if it is unstable and explodes or produces fumes, gases and vapors when mixed with water or under other conditions, such as heat or pressure. A waste may also be defined as reactive if it is a forbidden explosive or a Class A or Class B explosive as defined by the U.S. Department of Transportation. Examples of reactive wastes include certain cyanide or sulfide-bearing wastes. Reactive wastes carry the hazardous waste code designation of D003.

- **Toxic waste.** Wastes that are harmful or fatal when ingested or absorbed or leach toxic chemicals into the soil or groundwater when disposed of on land are considered toxic waste. A facility can determine if the waste is toxic by having it tested using a test called the Toxicity Characteristic Leaching Procedure (TCLP). If the waste contains any of the 40 regulated contaminants at concentrations equal to or greater than the regulatory levels, then the waste exhibits the toxicity characteristic. Examples of toxic waste include wastewater treatment sludge and pesticide/herbicide wastes. Toxic wastes carry the hazardous waste code designation of D004 through D043 (each toxic constituent present in the waste has its own hazardous waste code designation).
- **Mixtures of listed wastes and other wastes.** A mixture containing a nonhazardous solid waste and any amount of a listed hazardous waste is considered a hazardous waste. For example, if a pint of spent solvent, such as toluene or benzene (an F005 listed hazardous waste), is mixed with a 55-gallon drum of waste antifreeze, the entire mixture (e.g., 55 gallons plus one pint) is considered a hazardous waste (as opposed to only one pint being a hazardous waste had the two wastes not been mixed). Hence, it is very important to keep wastes segregated, because it's better for the environment and will reduce disposal costs. (It's more expensive to dispose of hazardous waste than it is solid waste.)

*Must a facility test its waste to determine if it's hazardous or can prior knowledge of the waste suffice?*

Either can be done. It may be more accurate to have each waste stream analyzed, but knowledge of the waste can also be used to make the determination. For additional information on making a waste determination, refer to DWM's website at <https://eec.ky.gov/Environmental-Protection/Waste/hazardous-waste/Pages/default.aspx>

Keep in mind that it is a facility's responsibility to ensure a proper hazardous waste determination is made for each solid waste. If a facility hires a consultant to perform waste determination activities, the facility is still liable for any incorrect determinations that may be made.

**Worksheet 1: Inventory of Waste Streams**

<b>Waste</b>	<b>Generated From:</b>	<b>SW (y/n)</b>	<b>HW (y/n)</b>

**Worksheet 2: Generator Size Determination**

<b>Hazardous Waste</b>	<b>Generated From:</b>	<b>Hazardous Waste Code(s)</b>	<b>Average Amount Generated/Month</b>

## Determining Generator Status

Once a facility has determined whether or not it generates hazardous waste, how much waste is generated on a monthly basis must be determined. This will help a facility determine its hazardous waste generator status. Table 1 (Summary of the Hazardous Waste Status of Wastes Generated by a Typical Auto Salvage Facility) lists whether a waste stream must be included in the waste generation calculation.

There are three generator categories into which a facility might fall.

- conditionally exempt small quantity generator (CESQG),
- small quantity generator (SQG)
- large quantity generator (LQG).

The type of generator a facility (i.e., generator status) is determined on a monthly basis and depends upon the amount of hazardous waste a facility generates within that calendar month.

**NOTE:** The measurements listed in each of the categories are in pounds and kilograms. Many hazardous wastes are liquids and measured in gallons. In order to measure a facility's liquid wastes, the facility will need to convert from gallons to pounds. To do this, density of the liquid must be known. A rough guide is that 30 gallons (about half of a 55-gallon drum) of waste with a density similar to water weighs about 220 pounds (100 kg); 300 gallons of a waste with a density similar to water weighs about 2,200 pounds (1,000 kg).

**Table 1: Summary of the Hazardous Waste Status of Wastes Generated by a Typical Auto Salvage Facility**

Product/Waste	Description/Mgt. Option	HW Status	Counted Toward Generator Status (if determined to be HW)
Aerosol Cans	Recycled or Disposed - Emptied	Not a HW	
	Recycled or Disposed - Not Emptied	Make a HW determination and manage accordingly	
Antifreeze	Recycled	Make hazardous waste determination	
	Disposed	Make a HW determination and manage accordingly	

<b>Product/Waste</b>	<b>Description/Mgt. Option</b>	<b>HW Status</b>	<b>Counted Toward Generator Status (if determined to be HW)</b>
Batteries	Recycled, managed as Universal Waste or except under 40 CFR 266.80	Not counted in determining HW generator status	
	Disposed	HW	
Brake and Clutch Repair (Asbestos)	Disposed – Not contaminated with a HW	Not a HW	
	Disposed - Contaminated with a HW (such as from some brake cleaners)	Must make a HW determination and manage accordingly	
Catalytic Converters	Recycled or Disposed	Not a HW, may be subject to DAQ rules	
Fluorescent Light Tubes and HID Lamps	Recycled as Universal Waste	Not counted in determining HW generator status	
	Disposed	Must make a HW determination and manage accordingly	
Fuel	Reused for its intended purpose or re-refined	Not a HW	
	Disposed	Must make a HW determination and manage accordingly	
Fuel Filters	Disposed	Must make a HW determination and manage accordingly	
Metal Parts	Recycled	Not a HW	
	Disposed	Not a HW	
	Recycled	May be a HW	



<b>Product/Waste</b>	<b>Description/Mgt. Option</b>	<b>HW Status</b>	<b>Counted Toward Generator Status (if determined to be HW)</b>
Mercury Switches	Disposed	Must make a HW determination and manage accordingly. May apply for a variance from DWM to consider as universal waste.	
Oil (Used)	Recycled (under the Used Oil Regulation)	Not a HW	
	Disposed	Must make a HW determination and manage accordingly	
Oil Filters (Used and Terne-Plated)	Recycled as scrap metal	Not a HW	
	Disposed	Must make a HW determination and manage accordingly	
Oil Filters (Used and Non-Terne-Plated)	Recycled - Drained	Not a HW	
	Recycled – Undrained (managed under the Used Oil Regulation)	Not a HW	
	Disposed - Drained	Not a HW	
	Disposed - Undrained	Must make a HW determination and manage accordingly	
Refrigerants (MVAC)	Recycled - Not contaminated	Not a HW	
	Disposed - Contaminated	Must make a HW determination and manage accordingly	
Solvents (Aqueous-Based)	Disposed	Must make a HW determination and manage accordingly	

<b>Product/Waste</b>	<b>Description/Mgt. Option</b>	<b>HW Status</b>	<b>Counted Toward Generator Status (if determined to be HW)</b>
Solvents (Petroleum-Based)	Reused for its original intended purpose or reused w/o first being reclaimed	Not a HW	
	Recycled or Disposed	Must make a HW determination and manage accordingly	
Sorbents	Recycled under the Used Oil Regulation (if contaminated with used oil only)	Not a HW	
	Disposed (or unable to manage under the Used Oil Regulation due to contamination with materials other than used oil)	Must make a HW determination and manage accordingly	
Tires	Recycled or Disposed	Not a HW, but subject to the Used Tire Rule or the Solid Waste rules	
Wastewater	Sent directly to the sanitary sewer	Not a HW, but subject to POTW's and DWM's regulations	
Wipes	Recycled (under the Used Oil Regulation if contaminated with used oil only)	Not a HW	
	Recycled	Must make a HW determination and manage accordingly	
	Laundered - (reusable wipes that have not been used to clean up spills of HW)	Not a HW	
	Disposed	Must make a HW determination and manage accordingly	

**Table 2: Determining Generator Status**

<b>GENERATOR STATUS</b>	<b>AMOUNT OF HW GENERATED PER MONTH</b>	<b>ON-SITE ACCUMULATION TIME</b>	<b>ON-SITE QUANTITY LIMIT</b>
Conditionally Exempt Small Quantity Generator (CESQG)	<p>≤ 220 pounds (approximately one half of a 55-gallon drum)</p> <p>≤ 2.2 pounds of acutely hazardous waste</p> <p>≤ 220 pounds of acutely hazardous spill residue</p>	N/A	<p>1,000 kg**</p> <p>1kg acute***</p> <p>100 kg acute spill residue***</p>
Small Quantity Generator (SQG)	Between 220 and 2,200 pounds (approximately one half to four 55-gallon drums)	No more than 180 days on-site or 270 days if shipped 200 miles or more *	6,000 kg (approximately thirty 55-gallon drums)
Large Quantity Generator (LQG)	2,200 pounds or more (more than four 55-gallon drums)	No more than 90 days on-site	No Limit
<p>* Hazardous waste that is transported more than 200 miles away for recovery, treatment or disposal can be stored for up to 270 days.</p> <p>** If a facility generates/accumulates more than the amount listed, it is subject to additional requirements.</p> <p>*** If a facility generates/accumulates more than this amount, it is subject to LQG requirements.</p>			

## ***Determining Requirements with Which a Facility Must Comply***

Once a facility has determined its generator status, a determination can be made for which hazardous waste rules the facility must comply. CESQGs have the smallest number of rules to comply with, while LQGs have the largest. A key point to remember when determining the requirements that apply to a facility are that generator status can change from month to month. For example, a facility generates less than 220 pounds (100 kg) of hazardous waste during the month of February. During that month, the facility is considered a CESQG and required to comply with the hazardous waste requirements that apply to CESQGs. Continuing with our example, during the month of March, a facility generates 550 pounds of hazardous waste. Since 550 pounds falls between the SQG accumulation amount of 220 and 2,200 pounds, a facility is now considered an SQG for the month of March and required to comply with the requirements that apply to SQGs. The SQG requirements apply until the waste exceeding the on-site quantity limit is shipped off-site. In order for a facility to change its generator status, it must modify its registration status with DWM by submitting the Notification of Hazardous Waste Activity Form (from DEP7037). Each time a generator changes their status or modifies their registration this must be done and the applicable fees must be paid.

See the Generator Summary Chart in Table 3 (pages 61-62) for a summary of the requirements that apply to each generator category. The numbers in each of the boxes in the table are sections within Title 40 of the Code of Federal Regulations (CFR). Referring to these sections within the CFR provides a facility with specific details for each of these requirements. The CFR can be found online at <https://www.ecfr.gov/cgi-bin/ECFR?page=browse>

In addition, a facility may consult the EPA's document entitled, "Managing Your Hazardous Waste: A Guide for Small Businesses," for additional information on these requirements. This document may be obtained by visiting the EPA's website at <https://www.epa.gov/hwgenerators/managing-your-hazardous-waste-guide-small-businesses>

There are a number of benefits to reducing the amount of hazardous waste generated at a facility. First, by increasing the amount of hazardous material that is reclaimed or recycled, the costs associated with disposal of the waste are avoided. Second, by reclaiming or recycling hazardous waste, the liability associated with the disposal of hazardous waste is limited. This is because the liability associated with any hazardous waste that is sent away for disposal does not end when it is shipped off-site. A facility is still potentially liable for cleanup costs under Superfund for any mismanagement of hazardous waste once it reaches the disposal facility. Third, reclaiming or recycling waste is much better for the environment and community.

**Table 3: Generator Summary Chart**

	<b>CESQG</b>	<b>SQG</b>	<b>LQG</b>
Quantity Limits	100 kg/month of hazardous waste, or  1 kg/ month of acute hazardous waste, or  < 100 kg/month of acute spill residue or soil (40 CFR 261.5(a) and (e))	Between 100–1,000 kg/month (40 CFR 62.34(d))	≥ 1000 kg/month of hazardous waste, or  ≥ 1 kg/month of acute hazardous waste, or  ≥ 100 kg/month of acute spill residue or soil (40 CFR 261.5(e) and Part 262)
EPA ID Number <sup>1</sup>	Not required (40 CFR 261.5)	Required (40 CFR 262.12)	Required (40 CFR 262.12)
On-Site Accumulation Quantity	1,000 kg 1 kg acute spill residue (40 CFR 261.5(f)(2) and (g)(2))	<6000 kg (40 CFR 262.34(d)(1))	No Limit
Accumulation Time	None (40 CFR 261.5)	180 days or 270 days (if >200 miles)(40 CFR 262.34(d) and (e))	90 days (40 CFR 262.34(a))
Storage Requirements	Comply with 40 CFR 261.5 and prevent releases	Basic requirements with technical standards for tanks or containers 40 CFR 262.34(d)(2) and (3)	Full compliance for management of tanks, containers or containment buildings 40 CFR 262.34(a)
Off-site Management of Waste	State approved or RCRA permitted/interim status facility (40 CFR 261.5(f)(3) and (g)(3))	RCRA-permitted/interim status facility (40 CFR 262.20(b))	RCRA-permitted/interim status facility (40 CFR 262.20(b))

<sup>1</sup> \*Information concerning the procedure to be used for obtaining an EPA ID number (optional for CESQG) and additional manifest requirements can be found on Division for Waste Management’s website at <https://eec.ky.gov/Environmental-Protection/Waste/hazardous-waste/Pages/default.aspx> or by calling DWM at 502-564-6716. Additionally, Kentucky SQG and LQG businesses (optional for CESQG) need to register with the DWM. Information can be found at DWM’s website: <https://eec.ky.gov/Environmental-Protection/Waste/Pages/default.aspx>.

	<b>CESQG</b>	<b>SQG</b>	<b>LQG</b>
Manifest	Not required (40 CFR 261.5)	Required (40 CFR 262.20)	Required (40 CFR 262.20)
Hazardous Waste Annual Report	Not required (40 CFR 261.5)	Required (401 KAR 32:040)	Required (401 KAR 32:040)
Personnel Training	Not required (40 CFR 261.5)	Basic training required (40 CFR 262.34(d)(5)(iii))	Required (40 CFR 262.34(a)(4))
Contingency Plan	Not required (40 CFR 261.5)	Basic plan (40 CFR 262.34(d)(5)(i))	Full plan required (40 CFR 262.34(a)(4))
Emergency Procedures	Not required (40 CFR 261.5)	Required (40 CFR 262.34(d)(5)(iv))	Required (40 CFR 262.34(a)(4))
DOT Transport Requirements	Yes (if required by DOT)	Yes (40 CFR 262.30-262.33)	Yes (40 CFR 262.30-262.33)

# SPILL/RELEASE PREVENTION, REPORTING AND REMEDIATION

A facility should avoid spills/releases and implement spill response procedures to help ensure that spills and releases are managed effectively. Doing so will help prevent a facility from performing a potentially costly cleanup.

## ***What Exactly Is a Spill? When and to Whom Does a Spill Have to be Reported?***

A spill is a release of more than one pint or one pound of an objectionable substance (such as oil, gasoline, solvents, antifreeze, etc.) that could threaten to enter the groundwater or surface water of the Commonwealth of Kentucky. This includes spilling an objectionable substance on the ground, into the water, or into a drain that does not lead to a wastewater treatment plant.

The Kentucky Revised Statutes regulating cleanups and spills are overseen and conducted by the Division of Waste Management's Superfund Branch.

Not all spills are reportable. Whether or not a spill must be reported depends on several factors, including:

- The material spilled and its Reportable Quantity (RQ). Each hazardous material has its own RQ, requiring the spill to be reported if it meets or exceeds the gallons/pounds corresponding to its RQ.
- The location of the spill, including whether the location is part of a wellhead protection area, near a private drinking water well or state water with a designated use, water owned by the federal government or within or outside the property boundary.
- Whether or not a spill response has been done.

**NOTE:** Any time there is a spill that reaches any waters of the Commonwealth (streams, ponds, ditches (perennial or intermittent), storm or sanitary sewers, wetlands, mudflats, sandflats or other navigable waters, etc.), it has to be reported immediately, and a spill response will need to be conducted regardless of whether it is a hazardous material or not.

As a general rule, all spills should be reported immediately if they:

- create a risk to public health from fire or explosion,
- are not contained within a building,
- come in contact with soil or water or

- leave the property or threaten to enter the waters of the Commonwealth (including groundwater).

A facility may obtain additional information about spill reporting via the DWM Superfund Branch website at <https://eec.ky.gov/Environmental-Protection/Waste/Pages/default.aspx> or by calling the Emergency Response Team (ERT) hotline at 800-928-2380 or 502-564-2380. An ERT staff member will provide assistance in determining if the spill is reportable, other notifications are necessary and the necessary response action.

A sample Spill Emergency Notification form is located at the end of this chapter. This should be completed and a copy placed for future reference near each of the phones in a facility.

Facilities failing to report and/or clean up a spill may be subject to an enforcement action.

### ***What If a Spill/Release Occurs During Vehicle-Crushing Activities?***

A facility may need to report the spill/release if the amount of material spilled/released exceeds its Reportable Quantity.

Keep in mind that even if the spill/release is below the Reportable Quantity for that material, it must be cleaned up. Releases of hazardous materials, regardless of the amount, must be properly disposed. This must be done at the time the spill/release occurs.

A facility can minimize its chances of having spills/releases by removing anything that might be released from the vehicle during crushing activities prior to the vehicle being crushed.

### ***What Should a Facility Do If There Is a Spill Or Release?***

There are a number of things that a facility should do when responding to a spill/release at the facility. These include the following:

- If appropriate, turn on the ventilation systems to vent the vapors out of the building.
- Alert others and call for help.
- If the spilled material is not flammable, set the containers upright and shut off the valves that released the material. If the container is damaged, place it in a compatible secondary container (e.g. bucket or overpacked drum).
- Place a spill boom/sock around drains to prevent spill material from entering the drain.
- If applicable, have properly trained personnel put on personal protective equipment (safety glasses, apron, gloves) while cleaning up the material.
- Clean up the spill using appropriate methods, including the following:



- scooping up the material with a dust mop and squeegee, if possible (such as with spilled oil);
- cleaning up the spill with a rag;
- spreading an absorbent material and
- removing any soil impacted by the spill.
- Containerize and make a hazardous waste determination on the spilled material, and then manage it accordingly. Spill materials that are used to clean up used oil may be managed under the Used Oil Regulation if the facility is following the Used Oil Regulation and burning the used oil for energy recovery. See the section on Oil Used for further information on the Used Oil Regulation.
- Report spills to the ERT 24-hour Environmental Emergency Response hotline as soon as possible, but no later than two hours after the incident, by calling 800-928-2380 or 502-564-2380. The ERT hotline is staffed 24 hours a day, 7 days a week. KY Emergency Response Team staff will request the following information:
  - Facility's name, address and EPA Identification Number (if applicable);
  - Date, time and type of incident (e.g., spill, fire, etc.);
  - Quantity and type of hazardous material involved in the incident;
  - Extent of injuries, if any;
  - Estimated quantity and disposal of recovered materials, if any; and
  - Acknowledgement that the facility is located within a wellhead protection area (if it is).

***Don't wait to report the spill. Call the 24- hour Environmental Emergency Response hotline, even if the above-listed information is not available.***

- When the spill is reported, the DWM Superfund Branch, will assist in notifying downstream users. However, it remains the facility's responsibility to notify downstream users of potentially contaminated water.
- Notify the chief of the responding fire department when a release of hazardous materials creates an unreasonable risk to public safety from fire or explosion.
- If material enters a drain leading to a wastewater treatment plant, the facility may be required to notify the local wastewater treatment plant. Whether or not a facility is required to report a spill depends upon the quantity and the material(s) spilled.

- If a facility is located in a wellhead protection area, there may be additional spill reporting requirements. Contact the local public water supply system to determine these requirements.

### ***How Should a Facility Prepare For Spill/Release Situations?***

The hazardous waste rules require small quantity generators (more requirements apply to large quantity generators) to

- Keep a spill kit on hand and replenish the kit with any materials used during a cleanup operation and
- Train employees on the proper response to chemical emergencies.

See the following chapter, entitled “[Emergency Plans and Employee Training](#),” for additional emergency planning and training information.

**GOOD IDEA:** To avoid a spill or reduce the amount of material that could potentially be spilled, a facility may want to consider the following:

- Pump liquid products directly from one area to another when possible (e.g. use an on-vehicle/closed-loop antifreeze recycler or add motor oil via a hose).
- Drain automotive fluids in a designated area where there are no connections to the storm drain or municipal sewer.
- Collect leaking or dripping fluids in designated drip pans or containers. Keep all fluids separate for recycling. When work on a vehicle is complete, immediately empty contents of drip pans into appropriate collection containers.
- If possible, keep all facility drains sealed, using an inflatable plug or absorbent pillow to eliminate the possibility of spill materials entering the drain.
- Remove anything from the vehicle that may cause a spill or release prior to crushing the vehicle.

**SPILL EMERGENCY NOTIFICATION**

**\*\*\*POST NEAR THE PHONE\*\*\***

Fire Department Phone #: \_\_\_\_\_

Police Department Phone #: \_\_\_\_\_

**Emergency Response Team (24 hours/day, 7 days/week)**  
**800-928-2380 or 502-564-2380**

County Health Department Phone #: \_\_\_\_\_

Local Public Works/Sewer Department Phone #: \_\_\_\_\_

Recovery Contractor's Name: \_\_\_\_\_

Phone #: \_\_\_\_\_

State Emergency Planning Commission Phone #: \_\_\_\_\_

**\*National Response Center (24 hours/day, 7 days/week)**  
**800-424-8802**

\* Local Emergency Planning Committee

Phone #: \_\_\_\_\_

(Contact the local Emergency Mgmt. Agency or County Health Dept. for the Local  
Emergency Planning Committee area content.)

\* ERT Hotline staff will help a facility determine if spills must be reported to these  
entities.

# RECORDKEEPING/REPORTING

Facilities with air, stormwater or hazardous waste permits are required by those permits to keep specific records.

## ***Air***

Facilities that must have a permit or are registered with the Division for Air Quality (DAQ) have specific monitoring, recordkeeping, and reporting requirements that are outlined in their air permit or regulation. See the “[Air Regulations](#)” section for more details about how to determine if your facility requires a DAQ registration or permit.

Facilities performing work on motor vehicle air conditioning (MVAC) systems must submit a one-time equipment owner certification form to the Environmental Protection Agency (EPA) and maintain the following records and certifications on-site:

- EPA equipment owner certification form for recovery or recovery/recycling machines (Only one form must be submitted, even if a facility has more than one machine.)
- Certification forms for each trained technician and facility operator
- Invoices and records documenting recovered refrigerant that was sent off-site for reclamation
- Documentation of refrigerant purchases

## ***Stormwater***

Under most operating conditions, facilities involved in the recycling of materials, including metal scrap yards, battery reclaimers, salvage yards and automobile junkyards must apply for an industrial stormwater permit. Please refer to the earlier section entitled, “[Stormwater](#),” for more information. Additional requirements can be found on the Division of Water (DOW) website at <https://eec.ky.gov/Environmental-Protection/Water/PermitCert/KPDES/Pages/default.aspx>

**It is always the facility operator, rather than the property owner, that is responsible for compliance with stormwater discharge limitations and requirements.**

- A facility requiring a Kentucky Pollution Discharge Elimination System (KPDES) general stormwater permit, must first submit a Notice of Intent to DOW. For additional requirements, contact DOW Surface Water Permits Branch at 502-564-3410.

## **For facilities that discharge to Publicly Owned Treatment Works**

- Contact the local publicly owned treatment works (wastewater treatment plant) to notify them prior to discharge of industrial wastewater.

- Additional requirements can be found on DOW Surface Water Permits Branch website at [https://eec.ky.gov/Environmental-Protection/Water/Comp\\_Insp/combinedseweroverflows/Pages/default.aspx](https://eec.ky.gov/Environmental-Protection/Water/Comp_Insp/combinedseweroverflows/Pages/default.aspx)
- Report spills.

## ***Hazardous Waste***

Hazardous waste generators, regardless of quantity, must:

- Determine and document the facility's hazardous waste generator classification. In order to do this, the following records must be kept:
  - The amount of hazardous waste generated, accumulated and stored on-site; and
  - The amount of hazardous waste recycled on-site or manifested off-site. A signed copy of the manifest returned from the TSD must be kept at the facility that generated the waste for a minimum of three years.
- Complete EPA Form 8700-22 (Uniform Hazardous Waste Manifest Form) each time a facility ships hazardous waste to an off-site facility. The form may be obtained from any of the approved registered sources that ship hazardous waste on the EPA's website at <https://www.epa.gov/hwgenerators/approved-registered-printers-epas-manifest-registry>.
  - The person who signs the manifest must have received proper training on the manifest form and procedures.
  - Each party that takes possession of the waste must sign the original manifest and keep one copy. The remaining portion of the manifest goes with the hazardous waste shipment until it reaches its final destination.
  - The treatment, storage or disposal facility must send a signed copy of the manifest back to the facility to verify that the shipment arrived.
  - For large quantity generators:
    - If the copy of the manifest is not sent to the facility within 30 days of the date the waste was picked up by the hauler, the facility must contact the hauler to determine the status of the hazardous waste.
    - If the copy of the manifest is not sent to the facility within 45 days of the date the waste was picked up by its hauler, the facility must complete an exception report that is accompanied by a

- Legible copy of the original manifest.
  - Letter that a facility representative has signed. The letter must explain the efforts the facility has taken to locate the hazardous waste and the results of those efforts.
- For small quantity generators:
    - If the copy of the manifest is not sent to the facility within 60 days of the date the waste was accepted by the hauler, the facility must submit a legible copy of the manifest, along with a note or letter indicating that the facility has not received confirmation of delivery. Send a letter to the Division of Waste Management (DWM) Hazardous Waste Branch, and to the EPA Region 4 office.
  - Keep copies of all hazardous waste manifests for three years.

All facilities that treat, store or dispose of hazardous waste must also obtain manifest forms from an organization approved by the EPA Manifest Registry. A list of approved organizations is available online at <https://www.epa.gov/hwgenerators/approved-registered-printers-epas-manifest-registry>

## **Recordkeeping for Hazardous Waste Manifests**

The following operations must submit Hazardous Waste Annual Reports to DWM Hazardous Waste Branch:

- Kentucky small-quantity generators (SQGs); large-quantity generators (LQGs); and treatment, storage and disposal (TSD) facilities and
- Generators who are normally conditionally exempt small-quantity generators (CESQGs) that for any one calendar month generate more than 100 kilograms (220 pounds) or accumulate on-site at any time more than 1,000 kilograms (2,200 pounds) of hazardous waste.

All SQGs, LQGs, and TSDs in Kentucky are required to submit the Hazardous Waste Annual Report (form DEP7072) and Assessment Return (form DEO7070) on an annual basis. They are due no later than March 1 and report information for the previous calendar year.

# LIABILITY AND ENFORCEMENT ACTIONS

## ***Choosing an Environmental Service Company***

As a waste generator, it is a facility's responsibility to ensure that its wastes are managed, transported and disposed in an environmentally responsible and legal manner. Even though the facility may have paid a hauler to legally transport its waste, the facility remains responsible for any improper management of that waste on the part of the original hauler or any subsequent hauler (if more than one hauler is involved). Keep in mind the facility remains accountable for any harm done by its waste, even harm that may occur after the waste has reached its final destination.

**NOTE:** A facility is responsible for any releases occurring during vehicle crushing activities conducted on-site, even if utilizing the services of a portable crusher.

## ***What Can a Facility Do If It Finds Areas of Noncompliance?***

If a violation is found at a facility during a self-audit, the company should contact the Division of Compliance Assistance (DCA) for help with correcting the issue and getting into compliance. A facility may be allowed a reduction of penalties for violations that are voluntarily reported to DCA if certain conditions are met. In addition, reporting and correcting the violation as soon as possible may limit the actual and/or potential harm to human health and the environment and result in reduced cleanup costs.

**NOTE:** A facility is not eligible for reduced penalties if a Department for Environmental Protection (DEP) inspector identifies violations during an inspection or record review prior to a self-audit and disclosure.

## ***What If a Free Environmental Assessment Audit By DCA Finds Areas Of Noncompliance?***

DCA exercises enforcement discretion, meaning it can provide a facility with a reasonable opportunity to correct any violations disclosed or identified during a compliance assistance activity. Violations will not be referred for enforcement or civil penalties under the following conditions:

- The violation is not identified as a result of conducting an inspection, investigation or records review.
- The discovery of the violation is not imminent.
- The violation has not been included as a part of a citizen suit filed under state or federal law.
- The violation is not reported by a third-party complaint.

- The violation is not reported by an employee who is not authorized to speak on behalf of the facility.
- The violation is not criminal in nature.
- The violation has not posed an imminent threat to human health or the environment.

### ***What Happens If a DEP Environmental Inspector Discovers a Violation?***

The goal of a regulatory program is to achieve compliance with applicable statutes, regulations, and permits. DEP inspectors routinely inspect locations, operations, and facilities for compliance. The regulated community is expected to correct all violations that are discovered. DEP inspectors have several options in addressing violations they identify, including:

- documenting violations in the inspection report,
- issuing a Letter of Warning,
- issuing a Notice of Violation,
- and referring the violations to the Division of Enforcement (DENF) to initiate a formal enforcement action.

Many violations are addressed through informal enforcement in which the inspector documents or cites a violation and the regulated entity corrects the violation. In these situations, the violations are resolved and no deterrence measures are applied. There are situations where the DEP inspector will issue a Notice of Violation and refer the violations to DENF for a formal action. This will often be done because of policy requirements, the violations are of a serious nature, or the responsible party failed to return to compliance.

DENF negotiates agreements that specify actions that are to be taken to return violations to compliance. These agreements may also include deterrence factors in the form of civil penalties. Civil penalties can be as much as \$25,000 per day the violation continued. Other factors are considered in the size of the civil penalty, including the statute violated, the nature and severity of the violation, the type of violation, potential and/or actual harm to human health and the environment, economic benefit gained by not complying with environmental regulations, and a facility's efforts to achieve compliance. The negotiated agreement will be formalized in a settlement document in the form of a Demand Letter or an Agreed Order.

When unable to reach an agreement with a responsible party, DENF will refer the violations to the Office of General Counsel for the Energy and Environment Cabinet. The Office of General Counsel will file a complaint with the Office of Administrative Hearings, which will begin the administrative hearing process. Through this process, the responsible party and the Energy and Environment Cabinet present evidence before a hearing officer. Based on the evidence, the hearing officer will send a report and a recommended order to the Secretary of the Energy and



Environment Cabinet. Upon reviewing the report, the Secretary can remand the matter back to the hearing officer, adopt the report and recommended order, or issue his own final order.

For more information, see DENF's webpage at <https://eec.ky.gov/Environmental-Protection/Enforcement/Pages/default.aspx>

# EMERGENCY PLANS AND EMPLOYEE TRAINING

Various plans, records, reports and employee trainings are required depending upon the activities conducted at a particular facility (e.g., the facility's generator category, whether the facility removes Freon, etc.). It is very important that the facility's operations are well-known in order to determine with which of the following requirements it must comply.

The information provided in this section applies to the activities that occur at most auto salvage facilities. Additional plans, record keeping/reporting and employee training requirements may apply to the facility, depending upon the activities that occur.

## ***Emergency Plans***

### **Hazardous Waste Emergency Procedures/Contingency Plans**

If a facility is a small quantity generator of hazardous waste, it must assign an emergency coordinator, who is responsible for the following:

- Posting the following information next to the facility's telephones:
  - Name and telephone number of the facility's emergency coordinator;
  - Location of the spill control material, fire extinguisher(s) and, if present, fire alarm;
  - Telephone number of the fire department (unless the facility has a direct alarm) and
  - Contact information and notification instructions for state and federal environmental response units and appropriate disaster emergency service organizations.
- Making sure all employees are thoroughly familiar with proper hazardous waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies;
- Responding to emergencies that arise at the facility by doing the following:
  - In the event of a spill, contain the flow of hazardous material to the extent possible, and clean up the hazardous material and any contaminated materials or soil as soon as practicable (assuming the employees have been properly trained in conducting these activities).
  - In the event of a fire, call the fire department or put out the fire using a fire extinguisher.

- Immediately notify the nearest fire department and environmental responders when a hazardous material release creates an unreasonable risk to public safety from fire or explosion.
- In the event of a fire, explosion or release threatening human health outside the facility or when there is knowledge that a spill reached surface water, Kentucky's Emergency Response Team (ERT) must immediately be notified at 800-928-2380 or 502-564-2380. ERT will request the following information:
  - Facility's name, address and EPA Identification Number, if applicable;
  - Date, time and type of incident (e.g., spill, fire, etc.);
  - Quantity and type of hazardous material involved in the incident;
  - Extent of injuries, if any;
  - Estimated quantity and disposition/makeup of recovered materials, if any; and
  - Acknowledgment that the facility is located within a Wellhead Protection Area (if that is the case).

**NOTE:** Large quantity generators are required to develop and maintain on-site a contingency plan, rather than the emergency procedures discussed above.

## **Spill Prevention, Control and Countermeasure Plan**

Depending on a facility's total aboveground storage capacity for all types of oils it keeps on-site (petroleum, synthetic, animal or vegetable; product or waste), it may be subject to the Federal Spill Prevention, Control and Countermeasure (SPCC) Rule. This spill-and-oil-pollution-prevention rule requires facilities to prevent the discharge of oils to navigable waters (essentially any type of waterway, including aquifers or natural or manmade conduits that discharge to navigable waters) and requires a formal facility-specific plan for controlling and cleaning up an oil spill if and when one occurs.

The SPCC Rule does not apply unless the total aboveground storage capacity for all oils at a facility is greater than 1,320 gallons (not counting containers of less than 55-gallon capacity, and buried tanks, which are subject to the Underground Storage Tank regulations). The basic requirements of this rule include providing secondary containment, performing periodic integrity tests for tanks and containers and having an SPCC plan for spill control and cleanup certified by a professional engineer.

Compliance with SPCC is handled by the U.S. Environmental Protection Agency Region 4 office in Atlanta. Information or questions regarding compliance with SPCC may be referred to that office at 404-562-9900.

The EPA also has a webpage on the Revised Spill Prevention, Control and Countermeasure Rule, available at <http://www.epa.gov/oilspill/spccrule.htm>

## ***Employee Training***

### **Hazardous Waste Emergency Training**

If a facility is a small quantity generator of hazardous waste, it must:

- Assign an emergency coordinator to post the following information next to the telephone:
  - Name and telephone number of the facility's emergency coordinator;
  - Location of the facility's fire extinguisher(s), spill control material and, if present, fire alarm;
  - Telephone number of the fire department (unless the facility has a direct alarm) and
  - Contact information and notification instructions for state and federal environmental response units and appropriate disaster emergency service organizations.
- Ensure all employees are thoroughly familiar with proper hazardous waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.
- Respond to emergencies that arise by doing the following:
  - In the event of a fire, call the fire department or put out the fire using a fire extinguisher.
  - In the event of a spill, contain the flow of hazardous material to the extent possible, and clean up the hazardous material and any contaminated materials or soil as soon as practicable (if the employees have been properly trained to handle these tasks).
  - In the event of a fire, explosion or a release that could threaten human health outside the facility or when there is knowledge that a spill has reached surface water, ERT must be immediately notified at 800-928-2380 or 502-564-2380. A facility must provide the following information to ERT:
    - facility's name, address and EPA Identification Number, if applicable;
    - date, time and type of incident (e.g., spill, fire, etc.);
    - quantity and type of hazardous material involved in the incident;
    - extent of injuries, if any; and

- estimated quantity and disposition/makeup of recovered materials, if any.

**NOTE:** Large quantity generators are required to provide employees with more extensive training than that discussed above. In addition, written documentation concerning the training and employees being trained is needed. Information concerning the training requirements for large quantity generators can be found on the Kentucky Division of Emergency Management's Training & Exercises website at <https://kyem.ky.gov/training/Pages/default.aspx>.

## **Other Training**

Regardless of the amount of hazardous waste that is generated, a facility's employees must be trained by an EPA-certified program if they are working on motor vehicle air conditioning (MVAC) systems. A list of EPA-certified training programs is available on the EPA's website at <https://www.epa.gov/mvac> or can be obtained by calling the EPA's Stratospheric Ozone Hotline at 800-296-1996.

# ACRONYMS and GLOSSARY

## ACRONYMS

BMP	Best Management Practices
BTU	British Thermal Unit
CAA	Clean Air Act
CESQG	Conditionally Exempt Small Quantity Generator
CFC	Chlorofluorocarbons
CFR	Code of Federal Regulations
CWA	Clean Water Act
DAQ	Division for Air Quality
DCA	Division of Compliance Assistance
DENF	Division of Enforcement
DIY	Do It Yourself (ex: Oil Change)
DOW	Division of Water
DWM	Division of Waste Management
ELVS	End-of-Life Vehicle Solutions
EPA	U.S. Environmental Protection Agency
EPCRA	Emergency Preparedness & Community Right to Know Act
ERT	Emergency Response Team
FP	Flash Point
GPP	Groundwater Protection Plan
HAP	Hazardous Air Pollutant
HFC	Hydrofluorocarbon
HWB	Hazardous Waste Branch
KAR	Kentucky Administrative Regulations
KPDES	Kentucky Pollution Discharge Elimination System
KPPC	Kentucky Pollution Prevention Center
KRS	Kentucky Revised Statutes
KSBDC	Kentucky Small Business Development Center
KSFM	Kentucky State Fire Marshal
KVE	Kentucky Vehicle Enforcement
KYEM	Kentucky Emergency Management
KYOSH	Kentucky Occupational Safety and Health
LDR	Land Disposal Restrictions
LEPC	Local Emergency Planning Committee
LMAPCD	Louisville Metro Air Pollution Control District
LQG	Large Quantity Generator
MCL	Maximum Contaminant Level
MSDS	Material Safety Data Sheet
MVAC	Motor Vehicle Air Conditioning
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NOV	Notice of Violation
NRC	National Response Center

O&M.....	Operations and Maintenance
PCB.....	Polychlorinated Biphenyl
P2.....	Pollution Prevention
PPE.....	Personal Protective Equipment
POTW.....	Publicly Owned Treatment Works
PVC.....	Polyvinyl Chloride
PWS.....	Public Water Supply (System)
RCRA.....	Resource Conservation and Recovery Act
RQ.....	Reportable Quantity
SFB.....	Superfund Branch
SPCC.....	Spill Prevention, Control and Countermeasure (Plan)
SQG.....	Small Quantity Generator
SWB.....	Solid Waste Branch or Surface Water Branch
SWPPP.....	Stormwater Pollution Prevention Plan
TCLP.....	Toxicity Characteristic Leaching Procedure
TSD.....	Treatment, Storage, Disposal (Facility)
UST.....	Underground Storage Tank
USTB.....	Underground Storage Tank Branch
VOC.....	Volatile Organic Compounds
WHPA.....	Wellhead Protection Area
WHPP.....	Wellhead Protection Program
WWTP.....	Wastewater Treatment Plant

## **GLOSSARY**

### **Aerosol**

A suspension of liquid or solid particles in a gas

### **Asbestos**

A naturally occurring mineral that when mined and processed, takes the form of small fibers, which are usually invisible to the naked eye. The fibers are heat-resistant and extremely durable.

### **Catalytic Converter**

An air pollution abatement device that removes pollutants from motor vehicle exhaust, either by oxidizing them into carbon dioxide and water or by reducing them to nitrogen and oxygen.

### **Characteristic**

Any one of the four categories used in defining hazardous waste: ignitability, corrosivity, reactivity and toxicity.

### **Chlorinated Solvent**

An organic solvent containing chlorine atoms, e.g., methylene chloride and 1,1,1 trichloromethane, used in aerosol spray containers and highway paint.

### **Chlorofluorocarbons (CFCs)**

A family of inert, nontoxic and easily liquefied chemicals used in refrigeration, air conditioning, packaging, insulation or as solvents and aerosol propellants. Because CFCs are not destroyed in the lower atmosphere, they drift into the upper atmosphere where their chlorine components destroy ozone.

### **Conditionally Exempt Small Quantity Generators (CESQG)**

Persons or enterprises that produce less than 220 pounds of hazardous waste per month and that meet the CESQG storage and disposal limitations. CESQGs are exempt from most hazardous waste regulations, but are required to determine whether their waste is hazardous and keep records of the quantity generated and stored on-site.

### **EPA**

United States Environmental Protection Agency

### **EPA Identification Number**

The unique code assigned to each generator, transporter and treatment, storage or disposal facility by regulating agencies to facilitate identification and tracking of chemicals or hazardous waste.



**Friable Asbestos**

Any material containing more than one percent asbestos and that can be crumbled or reduced to powder by hand pressure. (May include previously non-friable material, which becomes broken or damaged by mechanical force)

**Gasoline Volatility**

The property of gasoline whereby it evaporates into a vapor. Gasoline vapor is a volatile organic compound.

**Hazardous Air Pollutants**

Air pollutants that are not covered by ambient air quality standards, but which, as defined in the Clean Air Act, may reasonably be expected to cause or contribute to irreversible illness or death. Such pollutants include asbestos, beryllium, mercury, benzene, coke oven emissions, radionuclides and vinyl chloride.

**Hazardous Chemical**

An EPA designation for any hazardous material requiring an MSDS under OSHA's Hazard Communication Standard. Such substances are capable of producing fires and explosions or adverse health effects like cancer and dermatitis. Hazardous chemicals are distinct from hazardous waste (see Hazardous Waste).

**Hazardous Material**

A substance or material capable of posing an unreasonable risk to health, safety or property when transported in commerce

**Hazardous Substance**

- 1) Any material that poses a threat to human health and/or the environment.
- 2) Any substance designated by the EPA to be reported if a designated quantity of the substance is spilled in the waters of the United States or is otherwise released into the environment.

**Hazardous Waste**

By-products of society that can pose a substantial or potential hazard to human health or the environment when improperly managed. Possesses at least one of four characteristics (ignitability, corrosivity, reactivity or toxicity) or appears on special EPA lists.

**Incompatible Waste**

A waste unsuitable for mixing with another waste or material because it may react to form a hazard

**Kentucky Pollutant Discharge Elimination System (KPDES)**

A provision of the Clean Water Act that prohibits discharge of pollutants into waters of the Commonwealth unless a special permit is issued

**Manifest (Uniform Hazardous Waste Manifest Form 8700-22)**

This manifest is used to identify the quantity, composition, origin, routing and destination of a hazardous waste.

**Manifest System**

Tracking of hazardous waste from “cradle to grave” (generation through disposal) with accompanying documents known as manifests.

**Material Safety Data Sheet (MSDS)**

A compilation of information required under the OSHA Communication Standard on the identity of hazardous chemicals, health and physical hazards, exposure limits and precautions. Section 311 of SARA requires facilities to submit MSDSs under certain circumstances.

**Mercury Switch**

A convenience light switch that (1) is located in the hood or trunk lid of a motor vehicle; and (2) contains mercury

**Ozone Depletion**

Destruction of the stratospheric ozone layer, which shields the earth from ultraviolet radiation harmful to life. This destruction of ozone is caused by the breakdown of certain chlorine and/or bromine-containing compounds (chlorofluorocarbons or halons), which break down when they reach the stratosphere and then catalytically destroy ozone molecules.

**Permit**

An authorization, license or equivalent control document issued by the EPA or an approved state agency to implement the requirements of an environmental regulation; e.g., a permit to operate a wastewater treatment plant or to operate a facility that may generate harmful emissions

**Propellant**

Liquid in a self-pressurized pesticide product that expels the active ingredient from its container

**Publicly Owned Treatment Works (POTW)**

A waste treatment works owned by a state or unit of local government usually designed to treat domestic wastewater

**Release**

Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment of a hazardous or toxic chemical or extremely hazardous substance

**Sanitary Sewers**

Underground pipes that carry off only domestic or industrial waste

**Septic System**

An on-site system designed to treat and dispose of domestic sewage. A typical septic system consists of a tank that receives waste from a residence or business and a system of tile lines or a pit for disposal of the liquid effluent (sludge) that remains after decomposition of the solids by bacteria in the tank and must be pumped out periodically.

**Small Quantity Generator (SQG)**

Persons or enterprises that produce between 220 and 2,200 pounds per month of hazardous waste and that meet the SQG storage and disposal limitations.

**Storm Sewers**

Underground pipes that carry off only stormwater (as opposed to a sanitary sewer or a combined sewer)

**Sump**

A pit or tank that catches liquid runoff for drainage or disposal

**Suspect Material**

Building material suspected of containing asbestos, e.g., surfacing material, floor tile, ceiling tile, thermal system insulation, and miscellaneous other materials

**Tampering**

Adjusting, negating or removing pollution control equipment on a motor vehicle

**Treatment, Storage, Disposal (TSD) facility**

A facility that treats, stores or disposes of hazardous wastes

**Used Oil**

Oil that has been refined from crude oil or any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities. Examples include engine oil, sludge from used oil tanks, transmission fluid, refrigeration oil, compressor oil, hydraulic fluid, etc.

**Wastewater**

The spent or used water from a home, community, farm or industry that contains dissolved or suspended matter

**Wellhead Protection Area**

A protected surface and subsurface zone surrounding a well or wellfield supplying a public water system to keep contaminants from reaching the well water