Introduction
Automotive painting operations from small businesses like auto repair shops, vehicle repainting, and car/truck customization work can release pollutants into the air and local waterways as well as contribute to waste disposal concerns. This document will provide guidance for regulatory requirements as well as best management practices (BMPs) for preventing pollution associated with the painting processes utilized at auto repair shops.

For more guidance and an introduction to various environmental permits and authorizations issued by the Kentucky Department for Environmental Protection (DEP), please see DEP's At-A-Glance: Typical Environmental Authorizations. This factsheet is available online at: https://eec.ky.gov/Environmental-Protection/Compliance-Assistance/DCA%20Resource%20Document%20Library/PermitsAtaGlance.pdf.

Pollution Prevention
Pollution prevention (P2), also known as source reduction, is any practice that reduces, eliminates, or prevents pollution at its source prior to recycling, treatment or disposal. Potential benefits for automotive service and repair shops using P2 practices in everyday activities include:

- Reduced regulatory burden
- Decreased liability
- Improved environmental and health quality
- Increased productivity and efficiency
- Enhanced public image

Disclaimer: The list of BMPs and references within this document are not all-inclusive.

BMPs are effective means of preventing the amount of pollution generated by a facility.

Businesses that practice P2 are often viewed more favorably by consumers.

Need Help...
- establishing a pollution prevention program,
- training a team,
- or educating employees about preventing pollution?

Contact the Kentucky Pollution Prevention Center!
Website: www.kppc.org
Email: info@kppc.org
Phone: 502-852-0965
Preventing Air Emissions

Mixing and Painting

- Install and operate filter technology on all spray booths to achieve at least 98% capture efficiency.
- All spray booths should have downdraft ventilation systems and be physically separated from mixing rooms.
- Use less toxic paints (e.g. water based, low VOC, etc.).
- Keep paint/solvent containers closed when not in use.
- Only mix enough paint required for the job.
- Train employees in correct spray application procedures to lessen emissions and worker exposure.
- Use more efficient options for equipment (e.g. HVLP spray guns, ventilated sanders, enclosed cleaning systems).

Paint Gun Cleaning

- Use an enclosed automatic gun washing system to reduce VOC emissions and extend solvent life.
- Use a two-stage cleaning or an initial solvent rinse before putting spray gun in automatic washer for heavily coated equipment to extend the life of the solvent and reduce waste generated.
- Use alternative cleaners (e.g. water based, alkaline or microbial).
- Routinely check gun washers and part cleaning machines for leaks.

Paint Stripping and Miscellaneous Surface Coating Operations:

**National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Area Sources**

Applies to shops spraying coatings with chromium, lead, manganese, nickel or cadmium, or using paint strippers and cleaners containing methylene chloride.

Requirement with the regulation include:

- Initial notification
- Painter training
- Efficient spray guns
- Enclosed spray operations with 98% efficient filtration
- Enclosed gun washers

For details, visit:

Preventing Water Pollution

Solvents and Solvent Tank

- Install a filter on the solvent sink to increase the life of the solvent.
- Use less hazardous solvents or switch to a spray cabinet parts washers that does not use solvent.
- Keep different types of solvents in separate, clearly labeled, closed containers.

Mixing and Painting

- Perform painting and mixing operations indoors away from drains, ditches and surface waters.
- Store paint and solvents in low-traffic areas away from sanitary sewer and storm drains.
- Use secondary containment for hazardous materials storage, and inspect for leaks.
- Mark storm drain inlets and prevent discharge of cleaning solution to sewer or storm drains.
- Utilize storm drain protection devices (e.g. filter inserts).
- Do not dispose of liquid wastes on the ground or pavement.
- Clean water-based paints from brushes and tools in sinks hooked to sanitary sewers.
- Keep floors as clean as possible and prevent leaks before they spill on to the floor.
- Seal the shop floor with epoxy or other sealant.
- Clean small, non-chlorinated spills immediately with absorbent pads to collect cleaning water.
- Check with local officials to verify where your drains lead and get approval from the local sewer utility for floor cleaning wastes to enter the sanitary sewer system.

Kentucky Pollutant Discharge Elimination System (KPDES)

All wastewater discharges that enter the waters of the Commonwealth require a KPDES operating permit. Wastewater discharge can be produced from the treatment of wastes or the processes of certain activities and operations. Most facilities with this type of discharge require an individual permit. General permits, on the other hand, have been developed for sources that meet the criteria of general permit requirements. Another type of discharge includes those that are associated with stormwater.

For details, visit:
https://eec.ky.gov/Environmental-Protection/Water/PermitCert/KPDES/Pages/default.aspx
Wastes generated from repair and painting of damaged automobiles may consist of used/out-of-date paints, spent halogenated and non-halogenated solvents (e.g. acetone, toluene, benzene, xylene, methanol, methylene chloride, isopropyl alcohol), paint filters and spent rags/wipes. While most automotive paints are considered hazardous waste because of ignitability, some may be hazardous because of toxic metals.

### Preventing Waste Generation

#### Mixing and Painting:

- Rotate paint stock, using the oldest first.
- Clean up any spilled paint and/or solvents immediately with an absorbent.
- Do not spray washout solvent onto paint filters. Spray it into a container and pour into "Waste Paint".
- Use entire contents of pressurized spray cans.
- Use mechanical spray cans/bottles when possible.
- Return defective cans to the manufacturer or dispose of as hazardous waste when applicable.
- Do not empty spray cans by releasing their contents into the environment.
- Give leftover paint to the customer and use recyclable paint filters.
- Use rags/towels that can be laundered.
- Use a laundering service capable of handling rags contaminated with hazardous materials.
- Spray a minimum amount of solvent onto rags instead of soaking them.
- Remove excess solvent from rags before putting in container, so containers are not accumulating free liquids.

### Hazardous Waste Generator Activities and Facilities

Wastes with properties that make them dangerous or potentially harmful to human health or the environment are considered to be hazardous and are regulated by federal and state environmental laws. Hazardous waste must be managed according to regulations for your specific generator type which is based on the amount of waste generated in a calendar month.


*It is important to note that this guide does not include every permit and authorization issued by the department. Individuals should contact department staff for assistance with identifying all permits or authorizations that may apply to their unique circumstances.*