Checklist for Auto Repair Facility





New Jersey Department of Environmental Protection The Bureau of Sustainability

Use of this Checklist

This checklist provides a general overview of pollution prevention and safety techniques that can be applied to auto repair facility operations. State and federal rules and regulations take precedence over this checklist.

What is Pollution Prevention?

Pollution Prevention (P2), also known as source reduction, attempts to stop pollution before it starts. P2 encourages industries to realize the potential economic benefits of reducing the use and generation of hazardous substances. Implementing P2 can reduce or eliminate hazardous and environmentally harmful substances that will ultimately be disposed of, discharged, or released to the environment.

While every auto repair facility operation differs, every facility creates waste. There are common elements applicable to auto repair shops that are a cost of doing business, which can be reduced with proper planning. One can prevent pollution through implementing the techniques that are applicable to auto repair facilities.

Who Should Implement Pollution Prevention?

Auto repair facilities that use hazardous substances, produce hazardous waste and want to improve their environmental performance, reduce their environmental obligations and liability should implement P2. Furthermore, any business that wants to keep one step ahead of the competition by increasing efficiency and **reducing operating costs** should implement P2.

A business can **save money** through various P2 methods such as material substitution, in process recycling, product reformulation, and efficiency improvement. Implementing a P2 program will also help make the work environment safer for all employees, promote better community relations, and protect the environment. Environmentally responsible business practices also can be used as a marketing tool!

Pollution Prevention Practices in Auto Repair Facilities

Pressure from the government and the public to reduce hazardous waste disposal, discharges and releases of pollutants is changing the way companies do business. These changes are becoming increasingly focused on pollution prevention. Wastes will vary from each auto repair facility, but the overall source reduction of these wastes will benefit the facilities by reducing raw material needs, lowering disposal and treatment costs, and by decreasing the long-term liabilities associated with waste disposal.

<u>To reduce costs and liability</u>, the auto repair industry should examine three major types of waste generation.

- 1. **Solid Waste/Hazardous Waste** Auto repair facilities waste generally consists of tires, replaced used parts, spent cleaning solutions, empty containers, outdated materials, shop towels, and test products (some of the wastes mentioned may be considered hazardous).
- 2. **Wastewater** Auto shop liquid waste generally consists of water that comes in contact with oils, antifreeze, cleanup solvents, transmission fluid, chemicals, excess paint, acids, and alkalis.
- 3. **Air Emissions** –Air contaminants from auto repair operations, such as Volatile Organic Compounds (VOCs), Hazardous Air Pollutants (HAPs), and particulate produced from the use of cleaning solvents, brakes, paint, grinding and sanding dust, and other agents.

Auto Repair Facility Contact List

NJ DEP Bureau of Sustainability

Small Business Assistance Program 877-753-1151 [toll free] or 609-633-0631 Fax: 609-292-1921 Pollution Prevention 609-633-0631

NJ DEP Bureau of Chemical Release Information and Prevention NJ DEP - Bureau of Chemical Release Information and Prevention 609-292-6714

<u>Air Permits</u>

NJ DEP - Bureau of Preconstruction Permits 800-441-0065 [within NJ] or 609-292-6716

Hazardous Waste

USEPA RCRA ID# - 212-637-4106

Underground Storage Tanks

NJ DEP – Bureau of Underground Storage Tanks 609-292-8761

Wastewater

NJ DEP Pretreatment Residuals 609-633-3823

NJ DEP - Stormwater or Septic Permits 609-633-7021

NJ DEP - Point source discharges to surface water permits 609-633-3869 or 609-292-4860

<u>NJ Business Action Center</u> (Small Business Ombudsman) at 866-534-7789 Fax: 609-292-5509

Occupational Safety and Health Administration (OSHA) at 609-984-1389 [toll free]

USEPA Region II 212-637-3895

Department of Community Affairs 609-376-0802

EPA National Compliance Assistance Center

The Auto Compliance Information Assistance Center 847-749-4375

NJ DEP Hotline 877-WARN-DEP

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Material Inventory:

- Order and manage material to reduce expiring products. Simply put, "Do not order more inventory than you need."
- Use the "first in, first out" inventory procedure to reduce waste. This method will reduce the possibility of expired material by using the oldest material first.
- Material should be inspected when received. If materials are damaged or off-specification, they should be returned immediately.
- Expired material should be inspected and tested before disposal to determine if the expired material can be salvaged.
- Use a computerized inventory system to track inventory.
- Maintain Safety Data Sheets (SDSs) and a list of chemicals.

Used Oil:

- Use drip trays to prevent fluid from automobiles, parts and funnels from leaking onto the shop floor.
- Drain oil filters for a minimum of 12 hours to collect all residual oil prior to disposal or recycling and send oil filters for recycling as scrap metal.
- Use a licensed waste transporter with a USEPA ID to recycle waste oil. Your facility may need a USEPA ID number.
- Conduct regular inspections of waste oil tanks for leaks and spills.
- Hazardous waste fluids should not be mixed with used oil.
- Have your own staff inspect the material to ensure it is oil. (Use a "sniffer," a handheld detector to indicate total halogens are not higher than used oil).
- Be sure oil containers and piping are leak free, segregated, labeled "used oil" and approved by the local fire department.
- Install a containment system for outdoor oil tanks, to capture the oil in case of tank failure. (Ask for the Department's "Guide for Siting Used Oil Collection Tanks For "Do-It-Yourselfer" Recycling Programs.")
- Use floor drain systems with an oil/water separator that filters off all oil into separate containment and filter water to be discharged.

Used Antifreeze:

- Label antifreeze and recycle or dispose of properly.
- Waste antifreeze should be recycled either in an on-site unit (closed loop system), by a mobile service, or off-site. The antifreeze must meet current ASTM.
- For on-site recycling use filtration or distillation unit.
- Test your antifreeze using the Toxic Characteristic Leaching Procedure (TCLP) before you dispose of it according to environmental regulations. Never dispose of antifreeze through a storm sewer.

Batteries and Tires:

- Store batteries on pallets in a well-ventilated area with an impermeable floor and berm to allow for spill collection of contaminants. If the area does not have a berm, store batteries on pallet that has a built-in spill contamination in closed container (Note: wood panels may become contaminated with sulfuric acid and batteries should not be exposed to rainwater).
- Recycle batteries properly. (Refer to the battery manufacturer's instructions and follow local recycling rules).
- Use neutralizing agents, such as baking soda, near the battery storage area in case of leaks or spills.
- Tires stored outside are covered and properly disposed of.
- Purchase/use all aqueous brake washers that recalculate and filter with a detergent-based cleaning solution.

Body Repair, Paints, and Thinner:

- Estimate the surface area to be repaired before mixing body filler and paint.
- Use a high-volume/low pressure or low volume/low pressure spray gun. (Regularly clean and calibrate spray guns.)
- Reduce paint cup size on the spray.
- Instead of spray-painting, substitute electrostatic or powder coating application. (Not useable for auto repairs.)
- Scrape out excess paint before rinsing to reduce waste. Use an enclosed station for cleaning guns. Downdraft
- ventilation will reduce air contamination.
- Use small diameter hoses when dispensing solvent for cleaning spray guns.

□ Segregate waste paint and paint sludge from waste thinner. Mix or disperse paint only as needed to reduce waste.

Air Conditioning:

- When servicing auto air conditioning systems use refrigerant recycling or recovery equipment operated by a certified technician. Employees should be aware that it is illegal to vent refrigerants into the atmosphere.
- Refrigerant recovery machines are USEPA licensed and the USEPA certifies technicians.
- Maintain appropriate records on the purchase/use of refrigerants and notify USEPA of equipment and technician certification.

Parts Cleaning and Degreasing:

- Use citrus-based cleaning detergent-base or a cleaning system to replace a solvent or caustic-based system.
- Replace aerosol containers with refillable spray bottles.
- Consider the use of aqueous cleaning units such as spray cabinets and microbial-top units.
- Eliminate the use of cleaners and lubricants containing chlorinated solvents.
- Use parts cleaning system with ultrasonic or mechanical agitation.
- Pre-clean parts with a wire brush or shop towel.

Cleanup:

- Use dry and non-solvent cleaning procedures when applicable. Train employees to use the least amount of cleaner possible.
- Use high-pressure washing equipment to reduce the amount of wastewater generated. Dry equipment immediately after washing.
- Squeeze, wring or centrifuge rags to recover solvent before laundering, and reuse the solvent in parts washers.
- Do not soak rags in the solvent. Put the solvent on the rag with a spray bottle.
- Clean with reusable towels, instead of disposable towels.
- Use a cleaning solution with a low VOC/HAP content and a low vapor pressure to reduce waste, and to insure employee health and safety.
- For a spill, use the four-step method: 1) When oil is present use a hydrophobic mop, mopping back and forth, and avoid spreading the spill. Recycle the oil. 2) If antifreeze spills, mop it up and recycle it. 3) Use a rag until the floor is dry. 4) Use a wet mop only if necessary for final cleaning.
- Use absorbents only when the spill cannot be cleaned with shop rags or dedicated mops.

Good Housekeeping:

- Always use aprons, gloves and safety glasses.
- Perform regular maintenance of equipment to ensure that all machinery and processes are working efficiently. Check for leaks and spills, and perform repairs immediately (e.g., combustion sources such as heaters or boilers).
- Maintain spill-kits and instruct all employees in the proper use and location of the spill-kits.
- Prohibit the mixing of hazardous waste and non-hazardous waste. By keeping them separate you can readily recycle nonhazardous waste.
- To reduce spills, use spigots, pumps, and funnels when dispensing or transferring liquids to and from storage containers.
- Keep chemicals in safety cans or covered containers between uses to reduce evaporation, spills and contamination.
- Store material on pallets to check for leaks and reduce container corrosion from moisture.
- Seal the floor with epoxy resins.
- Use an overhead bulk-fluid delivery system.
- Store metal scraps in a covered and contained area.

Waste Accounting:

- Collect accurate data on the generation of waste from each source, such as spent cleaning solutions, used oil, and rags.
- Establish a tracking system for waste generation and encourage waste reduction.
- Provide feedback to your employees on waste reduction, informing them of their progress.
- Consider installing a distillation unit at your facility to recycle solvents.
- Consider recycling solvents off-site to be returned and reused.

