Environmental Best Management Practices

Pollution Prevention, Climate Adaptation and Toxic Mitigation

Auto Repair, Auto Body and Auto Salvage Industries

NEW YORK STATE | Department of Environmental Conservation

NYS P2I — Pollution Prevention Institute, New York State

NEW YORK CITY ENVIRONMENTAL JUSTICE ALLIANCE — N·Y·C E·J·A 19 91

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The NYS Department of Environmental Conservation's (NYSDEC) mission is to conserve, improve and protect New York's natural resources and environment and to prevent, abate and control water, land and air pollution, in order to enhance the health, safety and welfare of the people of the state and their overall economic and social well-being.

www.dec.ny.gov

The NY State Pollution Prevention Institute (NYSP2I) is a statewide research and technology transfer center providing a comprehensive and integrated program of research, technology development and diffusion, outreach, training and education aimed at making New York State more sustainable for workers, the public, the environment and the economy.

www.rit.edu/affiliate/nysp2i/

The New York City Environmental Justice Alliance (NYC-EJA) is a non-profit citywide network linking grassroots groups from low-income neighborhoods and communities of color in their struggle for environmental justice.

www.nyc-eja.org

OVERVIEW

As part of the project **"NYC Industrial Waterfront Communities Pollution Prevention, Toxics Reduction, and Resiliency Planning"** funded by the Environmental Protection Agency (EPA), the New York State Department of Environmental Conservation (NYSDEC), the New York State Pollution Prevention Institute (NYSP2I) and the New York City Environmental Justice Alliance (NYC-EJA) have collaborated to better understand the risks associated with climate change impacts for those living and working in the South Bronx Significant Maritime and Industrial Areas (SMIA). These partners identified the automotive sector as a prevalent industrial activity in the South Bronx SMIA and subsequently developed this toolkit to provide practical, actionable strategies to reduce the environmental footprint and the human health impacts of this industry. Moreover, the toolkit provides guidance on strategies and resources to assist with environmental compliance–including additional technical and financial resources that may be available to support their implementation. The toolkit consolidates existing knowledge and best practices for the automotive industry associated with pollution prevention (P2) technologies and process changes focused on green chemistry, green engineering, and climate adaptation, and strategies to reduce hazardous exposures in severe weather.

This toolkit is not regulation, nor can it be considered as a substitute for actual regulations. An effort has been made, however, to identify any guidance in this toolkit that may also be potential regulatory requirements. Such guidance is printed in red ink. Depending on the specific facility operations, other items not in red ink or not discussed in this toolkit may also be regulatory requirements. For more information, consult the NYS Department of Environmental Conservation website at www.dec.ny.gov.

TABLE OF CONTENTS

NYSDEC REGULATORY REQUIREMENTS

Note Carefully:

It is expected that the majority of the facilities discussed in this toolkit are subject to the New York State Department of Environmental Conservation (NYSDEC) hazardous waste regulations to varying degrees, most notably: hazardous waste, used oil, petroleum bulk storage, air emissions, and wastewater discharge. The NYSDEC website should be consulted for copies of the regulations and other related guidance. One particular set of regulatory requirements likely to be applicable to most facilities is the Hazardous Waste Regulations. Under those regulations, most of the facilities discussed in this guidance will fall within the Conditionally Exempt Small Quantity Generators (CESQG) category. A summary of the CESQG's requirements is provided below.

Regulatory Requirements for CESQGs:

CESQGs need to comply with the following hazardous waste requirements:

1. You must identify all hazardous waste generated at your shop.

2. You need to meet the maximum generation and storage quantity limits of 220 pounds per month (generation) and 2,200 pounds (storage). There is no storage time limit. If you exceed these limits, your hazardous waste generator category will change and you will have to comply with more requirements. **(Note that acute hazardous waste, e.g., dangerous chemicals that pose a threat to human health and the environment, has much lower limits. Facilities that generate more than 2.2 lbs. per month or store more than 2.2 lbs. are subject to additional regulatory requirements.)**

3. You need to ensure delivery of your hazardous waste to a NYSDEC-approved facility that is one of the following:

- A state or EPA-regulated hazardous waste management treatment, storage, or disposal facility
- A facility permitted by NYS to manage municipal or industrial solid waste and authorized to receive CESQG hazardous waste. For example, some landfills will take dry paints and still bottoms. Municipal incinerators may be able to take waste materials such as paint thinners and some solvent formulations. (You will need to obtain prior approval from these facilities.)
- A facility that uses, reuses, or legitimately recycles the waste. If you are recycling or treating the waste yourself, please call NYSDEC at (518) 402-8633 for more information
- A universal waste "destination facility" or "handler." Universal wastes are wastes such as fluorescent lamps and ballasts, mercury-containing equipment, certain batteries, or recalled or collected pesticides
- A permitted Household Hazardous Waste (HHW) collection facility that accepts CESQG waste. See the NYSDEC website at: http://www.dec.ny.gov/chemical/8780.html for a listing and phone numbers of HHW collection programs in your area

4. You need to ensure delivery of your hazardous waste to an approved facility by either hauling it yourself (up to 220 lbs. only) or by using a permitted hazardous waste hauler.

For other program areas, please consult NYSDEC's website:

http://www.dec.ny.gov

AUTO REPAIR TIPS

Auto repair operations that can be potentially hazardous to the environment and community include: parts cleaning, materials and waste handling, materials storage, and floor cleaning. Tips are provided in this toolkit to decrease work environment dangers as well as to mitigate the risks of releasing toxic and hazardous materials into the community.

This toolkit will provide some economically practical ways to reduce the chances of potentially harmful material from being exposed to the community and the environment. A single auto repair shop may not appear to be a significant waste contributor. However, the aggregate number of all auto repair shops across the six Significant Maritime Industrial Areas (SMIAs) on NYC's waterfront creates a potentially significant source of pollution.

Many of the following tips are considered Best Management Practices (BMPs) and are not necessarily required by regulations. If there is any uncertainty about regulations and compliance (environmental and safety), refer to resources provided in this toolkit for further assistance. Before BMPs are effectively implemented to further reduce waste and risks, it is imperative that all pertinent regulations are followed as a first step toward avoiding penalties, reducing liabilities, and becoming more sustainable.

Practical Strategies for Auto Repair Shops

Strategy descriptions:

- P2 A pollution prevention (P2) strategy is one that will reduce, eliminate, or prevent pollution from being introduced into the environment.
- CCA A climate change adaptation (CCA) strategy will help communities and ecosystems cope with changing climate conditions.

A detailed list of strategies is presented below, but the key principles that can have significant impact to becoming more climate resilient are highlighted first:

**Guidance on the strategies below can be found on the additional resources page.*

Category	Strategy	Self-Assessment Checklist		
Key P2/CCA Principles	P2 CCA Use alternate, safer, recycled, non-toxic products.	☐ Y	☐ N	☐ N/A
	CCA Reduce stormwater flow across the site and redirect flows away from storm drains and streets.	☐ Y	☐ N	☐ N/A
	P2 Reduce water use; use dry methods.	☐ Y	☐ N	☐ N/A
	P2 CCA Minimize solvent use. Transition to water-based solvents.	☐ Y	☐ N	☐ N/A
	P2 CCA Provide ongoing training for employees.	☐ Y	☐ N	☐ N/A
	P2 Recycle/reuse waste products.	☐ Y	☐ N	☐ N/A
General	P2 CCA Use a vehicle maintenance area designed to prevent stormwater pollution. Use berming and drainage routing for outside operations.	☐ Y	☐ N	☐ N/A
	P2 Inspect and clean leaks/drips regularly. Dispose of absorbent materials properly.	☐ Y	☐ N	☐ N/A
	P2 Sweep parking lots instead of washing with water.	☐ Y	☐ N	☐ N/A
General	P2 Send dirty rags to an industrial laundry.	☐ Y	☐ N	☐ N/A
	CCA Store bulk containers in bermed areas or on secondary containment pallets.	☐ Y	☐ N	☐ N/A
	CCA Store new batteries securely and used batteries indoors, in plastic trays.	☐ Y	☐ N	☐ N/A
	CCA Move or cover outside operations/material to limit possibility of stormwater contact.	☐ Y	☐ N	☐ N/A
	P2 CCA Monitor parked vehicles for leaks. Drain oil and other fluids first if the vehicle is to be stored outside. Do not allow leaking vehicles on site.	☐ Y	☐ N	☐ N/A
Servicing	P2 Construct a berm/trench at doorways and waste storage areas to prevent storm or rain water from entering or leaving the facility. Construct and manage a storm/rain water containment system if water accumulation is expected.	☐ Y	☐ N	☐ N/A
	P2 Avoid working over absorbent surfaces.	☐ Y	☐ N	☐ N/A

Category	Strategy	Self-Assessment Checklist		
Servicing	P2 CCA Perform vehicle fluid removal, changing fluids inside to prevent stormwater contamination.	☐ Y	☐ N	☐ N/A
	P2 Keep a drip pan under the vehicle while unclipping hoses, unscrewing filters, or removing other parts.	☐ Y	☐ N	☐ N/A
	P2 CCA Do not allow excessive buildup of oil and grease on equipment.	☐ Y	☐ N	☐ N/A
	P2 Avoid soldering over drip tanks. Sweep drippings and recycle/dispose of them as hazardous waste.	☐ Y	☐ N	☐ N/A
	P2 Puncture oil filters using a designed puncture tool, and allow them to drain over a pan for 24 hours prior to recycling. Store used filters in a separate, labeled container.	☐ Y	☐ N	☐ N/A
Parts Cleaning	P2 CCA Clean vehicle parts without using liquid cleaners. Steam cleaning and pressure washing may be used instead. Steam discharge must be discharged to an oil/water separator; never discharge into a sewer or drain.	☐ Y	☐ N	☐ N/A
	P2 CCA Use non-caustic detergents, water-based cleaning systems, and non-chlorinated solvents in place of caustic cleaning agents, organic solvent degreasers, and chlorinated solvents, respectively.	☐ Y	☐ N	☐ N/A
	P2 CCA Designate specific areas for cleaning. Cleaning should not take place outdoors.	☐ Y	☐ N	☐ N/A
	CCA Use self-contained sinks when using solvents.	☐ Y	☐ N	☐ N/A

Category	Strategy	Self-Assessment Checklist		
Parts Cleaning	P2 CCA Inspect degreasing sinks often for leaks and immediately repair them.	☐ Y	☐ N	☐ N/A
	P2 CCA Collect and reuse cleaning solvents and water. When reuse is no longer possible, solutions may be hazardous wastes and must be disposed of properly.	☐ Y	☐ N	☐ N/A
	P2 CCA Substitute carburetor cleaners containing chlorinated compounds with low-VOC cleaners.	☐ Y	☐ N	☐ N/A
	P2 Save and combine parts into single cleaning batches as opposed to separate cleaning cycles for individual parts.	☐ Y	☐ N	☐ N/A
	P2 Utilize distillation to recover solvents whenever possible.	☐ Y	☐ N	☐ N/A
Material and Waste Handling	P2 CCA Keep lids on waste containers and store under cover.	☐ Y	☐ N	☐ N/A
	P2 Do not pour liquid waste down floor drains or storm drains.	☐ Y	☐ N	☐ N/A
	P2 Recycle oil whenever possible.	☐ Y	☐ N	☐ N/A
	CCA Recycle all lead-acid batteries. Store batteries upright in a covered container placed away from drains. Do not place the batteries where freezing can occur.	☐ Y	☐ N	☐ N/A
	P2 CCA Keep used oil in a separate, labeled, watertight container in a secure place prior to recycling.	☐ Y	☐ N	☐ N/A
	CCA Store waste containers of antifreeze in secondary containment and dispose of properly.	☐ Y	☐ N	☐ N/A
	P2 CCA Store waste containers of used oil in secondary containment and dispose of properly.	☐ Y	☐ N	☐ N/A

Category	Strategy	Self-Assessment Checklist		
Material and Waste Handling	P2 CCA Consider replacing antifreeze that contains ethylene glycol with propylene glycol-based antifreeze. Propylene glycol is less toxic to the environment.	☐ Y	☐ N	☐ N/A
	P2 Install an antifreeze recycling unit that can filter fluid, flush the vehicle cooling system, and return antifreeze to the cooling system. This will decrease the amount of antifreeze purchased and the amount requiring disposal.	☐ Y	☐ N	☐ N/A
	P2 Catch dripping oil in pans.	☐ Y	☐ N	☐ N/A
	P2 CCA Containers should be structur ally sound, located in clearly visible areas, and placed off the ground or on an impervious surface in a covered area.	☐ Y	☐ N	☐ N/A
Spill Control	P2 CCA Develop a spill response plan. Be aware of the 24 hour NYSDEC spill hotline (1-800-457-7362).	☐ Y	☐ N	☐ N/A
	CCA Train employees on the facility's spill control plan and proper containment/cleanup procedures.	☐ Y	☐ N	☐ N/A
	CCA Develop a regular training schedule; new employees should be trained and annual refresher courses given.	☐ Y	☐ N	☐ N/A
	CCA Provide an adequate stockpile of easily accessible spill clean-up materials.	☐ Y	☐ N	☐ N/A
	CCA Contain and cover all wastes.	☐ Y	☐ N	☐ N/A
	P2 CCA Do not use bleach/disinfectants if the rinse water used could flow into storm drains.	☐ Y	☐ N	☐ N/A

Category	Strategy	Self-Assessment Checklist		
Spill Control	P2 CCA Prevent spills from reaching the floor. Use secondary containment for liquids being stored. Use drip pans and trays when transferring fluid and installing overhead fluid delivery systems.	☐ Y	☐ N	☐ N/A
	CCA Wring absorbed fluids into suitable containers for reuse/recycling.	☐ Y	☐ N	☐ N/A
	P2 Sweep every day; never hose work areas. Seal the floor with impervious materials.	☐ Y	☐ N	☐ N/A
	P2 Connect floor drains to holding tanks. If floor drains are connected to the municipal sewer, contact the NYC Department of Environmental Protection regarding discharge requirements. Schedule regular pumpouts and regularly check for leaks if using a holding tank.	☐ Y	☐ N	☐ N/A

Category	Strategy	Self-Assessment Checklist		
Dry Sanding	P2 Perform dry sanding indoors.	☐ Y	☐ N	☐ N/A
	P2 Use dry cleanup routinely to pick up dust.	☐ Y	☐ N	☐ N/A
	P2 CCA Use vacuum sanding equipment whenever possible.	☐ Y	☐ N	☐ N/A
Wet Sanding	P2 Do not wet sand in a wash rack or in an area with a floor drain.	☐ Y	☐ N	☐ N/A
	P2 Reduce the need for a sand bucket (use dent repair tools for small dents; use a spray bottle to squirt water onto panels to eliminate sanding bucket wastewater, etc.).	☐ Y	☐ N	☐ N/A
	P2 Clean drips with a rag or let them dry; then sweep dust.	☐ Y	☐ N	☐ N/A
	CCA Place a pan under the vehicle to catch drips and pour them back into the wet sanding bucket.	☐ Y	☐ N	☐ N/A
Floor Cleaning	CCA Collect and dispose of all filings, dust, and paint chips properly. Never sweep such materials outside.	☐ Y	☐ N	☐ N/A
	P2 CCA Use dry cleaning methods whenever possible.	☐ Y	☐ N	☐ N/A
Health and Safety	P2 CCA Avoid skin contact with chemicals.	☐ Y	☐ N	☐ N/A
	P2 CCA Make sure the area where chemicals are used is well ventilated.	☐ Y	☐ N	☐ N/A
	P2 CCA Store heavy parts above the floor, between knee and shoulder level.	☐ Y	☐ N	☐ N/A

Additional Resources Available Online:

Technical Assistance

www.dec.ny.gov

www.epa.gov

Financial Assistance

www.esd.ny.gov

www.nycedc.com/nycida

Auto Body Tips

Many tasks are performed in an auto body shop on a daily basis. These tasks include sanding, painting, welding, grinding, and other operations. Tips are provided below to create a safer work environment, as well as to decrease the possibility of toxic and hazardous materials being introduced into the community.

An auto body shop has many different hazardous materials on site that, if not properly stored, can be introduced into the environment in the event of a natural disaster (e.g., Hurricane Sandy). One of the main goals is to implement strategies that will safeguard the environment as well as the community from being exposed to these hazardous materials.

Many of the tips below are considered Best Management Practices (BMPs) and are not necessarily required by regulations. Keep material purchase/usage records on site. If there is any uncertainty about regulations and compliance (environmental and safety), refer to resources provided in this toolkit for further assistance. Before BMPs are effectively implemented to further reduce waste and risks, it is imperative that all pertinent regulations are followed as a first step toward avoiding penalties, reducing liabilities, and becoming more sustainable.

Practical Strategies for Autobody Shops

P2 A pollution prevention (P2) strategy is one that will reduce, eliminate, or prevent pollution from being introduced into the environment.

CCA A climate change adaptation (CCA) strategy will help communities and ecosystems cope with changing climate conditions.

**Guidance on the strategies below can be found on the additional resources page.*

Category	Strategy	Self-Assessment Checklist		
Key P2/CCA Principles	P2 CCA Use alternate, safer, recycled, non-toxic products.	☐ Y	☐ N	☐ N/A
	CCA Reduce stormwater flow across the site and redirect flows away from storm drains and streets.	☐ Y	☐ N	☐ N/A
	P2 Reduce water use; use dry methods.	☐ Y	☐ N	☐ N/A
	P2 CCA Minimize solvent use. Transition to water-based solvents.	☐ Y	☐ N	☐ N/A
	P2 CCA Provide ongoing training for employees.	☐ Y	☐ N	☐ N/A
	P2 Recycle/reuse waste products.	☐ Y	☐ N	☐ N/A
General	P2 Clean equipment immediately after use to prevent waste buildup.	☐ Y	☐ N	☐ N/A
	P2 CCA Use first-in, first-out inventory system, and only order material as needed.	☐ Y	☐ N	☐ N/A
	P2 Use paintless dent-repair techniques.	☐ Y	☐ N	☐ N/A
	P2 Never clean spills with water, use rags.	☐ Y	☐ N	☐ N/A
	P2 CCA Label hazardous waste containers and keep them closed and separate from non-hazardous waste and virgin materials.	☐ Y	☐ N	☐ N/A

Category	Strategy	Self-Assessment Checklist		
General	CCA Have emergency response procedures in place and assign an emergency coordinator.	☐ Y	☐ N	☐ N/A
	CCA Keep material purchase/ usage records on site.	☐ Y	☐ N	☐ N/A
	CCA Keep hazardous waste manifests and Safety Data Sheets (SDS) indefinitely.	☐ Y	☐ N	☐ N/A
	P2 CCA Keep all containers closed to prevent release of chemical vapors.	☐ Y	☐ N	☐ N/A
	P2 CCA Keep paints, cleaners, and any other chemicals protected from rainwater. Runoff will be avoided in the event of a flood.	☐ Y	☐ N	☐ N/A
	P2 CCA Provide secondary containment for all chemicals, including waste fluids, paints, thinners, strippers, cleaners, and automotive fluids.	☐ Y	☐ N	☐ N/A
	P2 Use dry cleaning methods, such as sweeping and vacuuming, when cleaning the shop. Do not wash materials into the floor drain or sewer.	☐ Y	☐ N	☐ N/A
Painting	P2 CCA Use alternatives to solvent-based paint, i.e., waterborne paint or powder coating.	☐ Y	☐ N	☐ N/A
	P2 CCA Eliminate paint strippers that contain methylene chloride (and any other VOC). Methylene chloride is a known carcinogen.	☐ Y	☐ N	☐ N/A
	P2 CCA Collect all unused paint for reuse or proper disposal.	☐ Y	☐ N	☐ N/A
	P2 Use a High-Volume Low-Pressure (HVLP) enclosed spray gun to reduce air emissions.	☐ Y	☐ N	☐ N/A
	P2 CCA Use low Volatile Organic Compounds (VOC) coatings.	☐ Y	☐ N	☐ N/A

Category	Strategy	Self-Assessment Checklist		
Painting	P2 CCA Use tinted primers to reduce base coat usage.	☐ Y	☐ N	☐ N/A
	P2 CCA Use citrus or water-based spray gun cleaners.	☐ Y	☐ N	☐ N/A
	P2 CCA Use disposable paint cup liners for spray guns.	☐ Y	☐ N	☐ N/A
	P2 Use two-stage cleaning on paint guns. This will extend the life of the cleaning solvent and reduce the waste generated.	☐ Y	☐ N	☐ N/A
	P2 CCA Use an enclosed, automatic paint gun washer. This can retain up to 90 percent of the solvent vapors and limits the operator's exposure to the solvent.	☐ Y	☐ N	☐ N/A
	P2 CCA Make a hazardous waste determination of all waste materials generated at site. If hazardous, it must be managed per NYS Hazardous Waste Regulations.	☐ Y	☐ N	☐ N/A
	P2 CCA Use computerized systems to improve paint mixing.	☐ Y	☐ N	☐ N/A

Category	Strategy	Self-Assessment Checklist		
Sanding	P2 CCA Collect sanding dust at its source by using a vacuum sander. Dust may contain toxic metals (lead, arsenic, cadmium, chromium, etc.).	☐ Y	☐ N	☐ N/A
	P2 Minimize wet sanding using a spray bottle and drip pans.	☐ Y	☐ N	☐ N/A
	P2 Do not sweep or wash the sand outside the shop.	☐ Y	☐ N	☐ N/A
Solvents	P2 Recycle solvents with a distillation unit.	☐ Y	☐ N	☐ N/A
	P2 Reuse flushing and rinsing solvents for thinning.	☐ Y	☐ N	☐ N/A
	P2 CCA Purchase a parts washer with a lid, or cover the unit when not in use. Reducing solvent evaporation will save money.	☐ Y	☐ N	☐ N/A

Category	Strategy	Self-Assessment Checklist
Solvents	P2 CCA Consider using aqueous cleaners instead of organic solvents.	☐ Y ☐ N ☐ N/A
	P2 Consider a recirculating parts washer; this will save money on solvent.	☐ Y ☐ N ☐ N/A
	P2 Pre clean equipment by wiping excess materials off prior to washing.	☐ Y ☐ N ☐ N/A
	P2 Use a wastewater collection system to collect and recycle wash water for car washing.	☐ Y ☐ N ☐ N/A
	P2 Do not throw away solvent because of discoloration. Performance may still be acceptable.	☐ Y ☐ N ☐ N/A
Welding	P2 Complete welding an hour before closing to give enough time for the torch to cool down. This lowers the risk of fires in the shop overnight.	☐ Y ☐ N ☐ N/A
	P2 When welding, use heat shields to confine heat and sparks.	☐ Y ☐ N ☐ N/A
	P2 Safely handle and store compressed welding gases.	☐ Y ☐ N ☐ N/A
Health and Safety	P2 Make sure area where chemicals are used is well ventilated.	☐ Y ☐ N ☐ N/A
	P2 Avoid skin contact with chemicals.	☐ Y ☐ N ☐ N/A
	P2 Do not use compressed air to remove dust from clothes or surfaces.	☐ Y ☐ N ☐ N/A
	P2 Never eat, drink, or smoke in a spray-painting area.	☐ Y ☐ N ☐ N/A
	P2 Contact the local fire department and inform them of the shop's location and specific hazards.	☐ Y ☐ N ☐ N/A

Category	Strategy	Self-Assessment Checklist
Health and Safety	P2 Store heavy parts above the floor, between knee and shoulder level.	☐ Y ☐ N ☐ N/A
	P2 Follow appropriate Personal Protective Equipment (PPE) procedures.	☐ Y ☐ N ☐ N/A
	P2 Develop an eye-protection policy.	☐ Y ☐ N ☐ N/A
	P2 Provide extended-cuff nitrile gloves, chemical-resistant shoot suits, head socks, and other coverings. No exposed skin should come into contact with catalysts, hardeners, or mixed coating and paint products.	☐ Y ☐ N ☐ N/A
	P2 Use gloves and respirators when cleaning paint guns.	☐ Y ☐ N ☐ N/A

Additional Resources Available Online:

Technical Assistance

www.dec.ny.gov

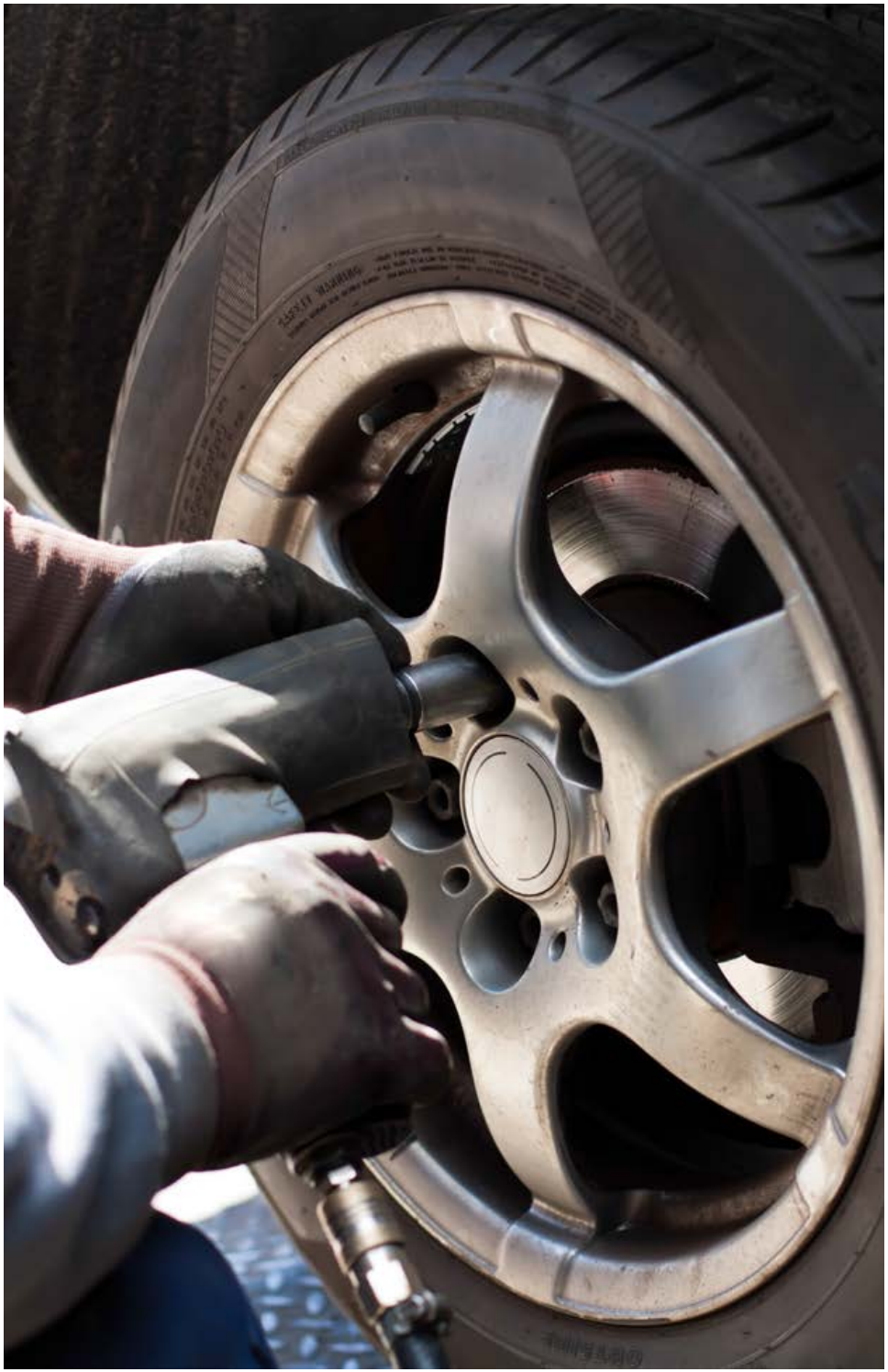
www.osha.gov

www.epa.gov

Financial Assistance

www.esd.ny.gov

www.nycedc.com/nycida



Auto Salvage Tips

An auto salvage facility typically dismantles vehicles to recover parts and fluids for resale, reuse or disposal. However, breaking down a vehicle creates potential scenarios for hazardous and toxic materials to be released into the environment and into the community. As a result, tips are provided in this section to mitigate the risks of toxic and hazardous material releases.

Many of the tips below are considered Best Management Practices (BMPs) and are not necessarily required by regulations. If there is any uncertainty about regulations and compliance (environmental and safety), refer to resources provided in this toolkit for further assistance. Before BMPs are effectively implemented to further reduce waste and risks, it is imperative that all pertinent regulations are followed as a first step toward avoiding penalties, reducing liabilities, and becoming more sustainable.

Practical Strategies for Auto Salvage Facilities

P2 A pollution prevention strategy (P2) is one that will reduce, eliminate, or prevent pollution from being introduced into the environment.

CCA A climate change adaptation (CCA) strategy will help communities and ecosystems cope with changing climate conditions.

**Guidance on the strategies below can be found on the additional resources page.*

Category	Strategy	Self-Assessment Checklist		
Key P2/ CCA Waste Reduction Principles	P2 Do not let liquids evaporate.	☐ Y	☐ N	☐ N/A
	P2 Maintain equipment to prevent leaks and spills. If needed, use lightweight, reusable absorbents.	☐ Y	☐ N	☐ N/A
	P2 CCA Keep all chemicals and wastes in closed containers.	☐ Y	☐ N	☐ N/A
	P2 Always transfer liquids with funnels or pumps.	☐ Y	☐ N	☐ N/A
	P2 Place steps next to storage drums to prevent spills.	☐ Y	☐ N	☐ N/A
	P2 CCA Seal floor drains. Do not discharge wastewater to the ground, dry wells, or septic systems.	☐ Y	☐ N	☐ N/A
	P2 Recycle and reuse your waste whenever possible (e.g., recycle solvent and reuse gasoline).	☐ Y	☐ N	☐ N/A
	P2 CCA Mobile vechicle crushers should be placed on top of an impervious surface or heavy-duty plastic sheeting.	☐ Y	☐ N	☐ N/A
	P2 CCA Try to keep the crusher in a designated area. This will keep potential contamination localized.	☐ Y	☐ N	☐ N/A
Key P2/ CCA Waste Reduction Principles	P2 CCA Drain vehicles prior to crushing. Remove fuel tanks, batteries and mercury switches before crushing vehicles.	☐ Y	☐ N	☐ N/A
	P2 CCA Train employees to use chemicals correctly, efficiently, and safely using minimum amounts.	☐ Y	☐ N	☐ N/A
Fluids	P2 CCA Inspect storage tanks for leaks.	☐ Y	☐ N	☐ N/A
	P2 CCA Clean up spills immediately. If soil is contaminated, store it in a labeled container. If applicable, report spills to NYSDEC Spills Hotline within two hours.	☐ Y	☐ N	☐ N/A
	CCA Store any parts, such as engines containing grease, on impervious surfaces protected from runoff and rain.	☐ Y	☐ N	☐ N/A
	P2 Generators may burn used oil in used oil-fired space heaters provided that: (1) the heater burns only used oil that the owner or operator generates or used oil received from household do-it-yourself used oil generators; (2) the heater is designed to have a maximum capacity of not more than 0.5 million Btu per hour; and (3) the combustion gases from the heater are vented to the outside ambient air.	☐ Y	☐ N	☐ N/A
	P2 Ship antifreeze to a certified site to be recycled/disposed.	☐ Y	☐ N	☐ N/A
	P2 CCA Drain fuel tanks in a way that prevents fire/explosion risks.	☐ Y	☐ N	☐ N/A
	P2 Remove fuel tanks prior to crushing cars.	☐ Y	☐ N	☐ N/A

Category	Strategy	Self-Assessment Checklist
Fluids	P2 CCA Store fuel tanks in a way that allows ventilation of the tank but not precipitation to enter the tank.	☐ Y ☐ N ☐ N/A
	P2 Safely reuse fuel on site when possible.	☐ Y ☐ N ☐ N/A
	P2 CCA Safely recycle recovered fuel.	☐ Y ☐ N ☐ N/A
	P2 Use hinged-lid funnels to add material to waste containers.	☐ Y ☐ N ☐ N/A
	P2 Use dedicated equipment for different waste streams to prevent cross contamination.	☐ Y ☐ N ☐ N/A
	CCA Provide secondary containment such as berms/dikes around storage areas.	☐ Y ☐ N ☐ N/A
	P2 Reuse absorbent materials until it is no longer effective.	☐ Y ☐ N ☐ N/A

Category	Strategy	Self-Assessment Checklist
Fluids	P2 Use refillable, mechanical spray cans rather than aerosol sprays.	☐ Y ☐ N ☐ N/A
	P2 Use solvents with the lowest possible VOC or use citrus, water or detergent-based cleaners.	☐ Y ☐ N ☐ N/A
	P2 Collect brake fluid and place in a properly labeled container.	☐ Y ☐ N ☐ N/A
Batteries and Fluorescent Lamps	P2 CCA Remove batteries before storing vehicles. Store batteries indoors whenever possible. Alternatively, keep batteries on a pallet under cover or in a leak-proof container.	☐ Y ☐ N ☐ N/A

Category	Strategy	Self-Assessment Checklist		
Batteries and Fluorescent Lamps	P2 Test batteries from cars to determine if any are still usable.	☐ Y	☐ N	☐ N/A
	CCA Inspect batteries before storage to prevent leaks.	☐ Y	☐ N	☐ N/A
	P2 Send batteries/fluorescent lamps to be recycled or disposed of in an environmentally safe manner.	☐ Y	☐ N	☐ N/A
	P2 Label waste batteries/fluorescent lamps "Used/Waste Batteries/Lamps" with the date they became waste and manage them as universal waste.	☐ Y	☐ N	☐ N/A
	P2 CCA Avoid long-term storage of batteries. Recycle batteries every 6 months.	☐ Y	☐ N	☐ N/A
	P2 Place a layer of cardboard between each layer of batteries when stacking them.	☐ Y	☐ N	☐ N/A
	P2 Store batteries on an impervious surface.	☐ Y	☐ N	☐ N/A
	P2 Store leaking/damaged batteries/lamps in closed containers.	☐ Y	☐ N	☐ N/A
Storage Containers	CCA Roofed secondary containment minimizes the amount of rainwater collected and snow damage.	☐ Y	☐ N	☐ N/A
	P2 CCA All used-oil storage containers are subject to Petroleum Bulk Storage registration requirements. Please contact the NYSDEC Petroleum Bulk Storage unit at (718) 482-6454.	☐ Y	☐ N	☐ N/A

Category	Strategy	Self-Assessment Checklist		
Solvent Cleaning	P2 Clean parts in 2-3 stages. Have a dedicated washing unit followed by a clean-rinse station.	☐ Y	☐ N	☐ N/A
	P2 Limit splashing and dripping; use drain racks to save solvent.	☐ Y	☐ N	☐ N/A
	P2 Monitor change-out schedules and filtering to extend cleaner life.	☐ Y	☐ N	☐ N/A
	P2 Consider using parts washers equipped with filters and other treatment options.	☐ Y	☐ N	☐ N/A
	P2 Use an on-site distillation unit to recycle spent solvent.	☐ Y	☐ N	☐ N/A
	P2 CCA Consider solvent with the least amount of environmental impact.	☐ Y	☐ N	☐ N/A
Inventory/ Time Management	P2 Use a computer to track parts and waste inventories.	☐ Y	☐ N	☐ N/A
	CCA Do not order an excess amount of supplies.	☐ Y	☐ N	☐ N/A
	CCA Consider using one central cleaning station.	☐ Y	☐ N	☐ N/A
	P2 To save time and labor, fully dismantle a vehicle as soon as it enters the yard (dismantling on an "as-needed" basis ends up taking more time and effort overall).	☐ Y	☐ N	☐ N/A
Vehicle Crushers	CCA Situate vehicle crushers and drain racks on a surface that is bermed/self-contained as well as impervious.	☐ Y	☐ N	☐ N/A
	CCA Floor surface should be sloped to contain fluids.	☐ Y	☐ N	☐ N/A
	P2 Position crushers and drain racks toward the center of the surface rather than along the edge.	☐ Y	☐ N	☐ N/A

Category	Strategy	Self-Assessment Checklist
Toxic Pollutants	P2 If removing air conditioners, properly remove any Freon in vehicles. Technicians must be EPA certified.	☐ Y ☐ N ☐ N/A
	P2 Do not vent refrigerant into the air; make sure that all AC openings are sealed after evacuation to prevent leaking of residual refrigerant.	☐ Y ☐ N ☐ N/A
	P2 Remove mercury switches from the vehicle but never remove mercury from the switch itself.	☐ Y ☐ N ☐ N/A
	P2 Store removed mercury switches in heavy-duty plastic containers.	☐ Y ☐ N ☐ N/A
	P2 Label containers of waste mercury switches "Used/ Waste Mercury-Containing Equipment" with the date they became waste. Manage as universal waste.	☐ Y ☐ N ☐ N/A

Category	Strategy	Self-Assessment Checklist
Toxic Pollutants	P2 CCA Keep drums, containers and parts washers covered and turned off when not in use.	☐ Y ☐ N ☐ N/A
	P2 Do not clean brakes/clutch-es with air hoses, dry/wet brushes, rags, garden hoses, squirt bottles, solvent spray or shop vacuums. Use a HEPA vacuum cleaner.	☐ Y ☐ N ☐ N/A
	P2 Use specially designed low-pressure spray equipment to wet down dust when remov-ing brake shoes or clutches.	☐ Y ☐ N ☐ N/A
Wastewater	P2 Attempt to treat/reuse process wastewater on site.	☐ Y ☐ N ☐ N/A
	P2 Contact the NYC Department of Environmental Protection regarding requirements for discharge to the municipal sewer system.	☐ Y ☐ N ☐ N/A
Hazardous Waste	P2 Make a hazardous waste determination (either by knowledge or testing) of your waste material.	☐ Y ☐ N ☐ N/A
	P2 Do not mix used oil with other non-oil wastes.	☐ Y ☐ N ☐ N/A
	P2 CCA Clearly mark and label all areas and containers where hazardous waste is stored.	☐ Y ☐ N ☐ N/A
	CCA Make sure area is protected from stormwater runoff and rain.	☐ Y ☐ N ☐ N/A
Waste Tire Management	P2 Strive to store tires inside. This will prevent standing water from accumulating in them.	☐ Y ☐ N ☐ N/A
	P2 Do not store tires for more than 6 months.	☐ Y ☐ N ☐ N/A
	P2 Tire piles must be lower than 20-feet high and less than 50-feet in width.	☐ Y ☐ N ☐ N/A

Category	Strategy	Self-Assessment Checklist		
Health and Safety	P2 Wear the proper PPE to prevent potential exposure to asbestos from removing brake shoes and clutches.	☐ Y	☐ N	☐ N/A
	P2 Avoid skin contact with chemicals.	☐ Y	☐ N	☐ N/A
	P2 CCA Store heavy parts above floor, between knee and shoulder level.	☐ Y	☐ N	☐ N/A
	P2 Train employees to use chemicals correctly, efficiently, and safely using minimum amounts.	☐ Y	☐ N	☐ N/A

Additional Resources Available Online:

Technical Assistance

www.dec.ny.gov

www.epa.gov

Financial Assistance

www.esd.ny.gov

www.nycedc.com/nycida

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