

Michigan Department of Environmental Quality  
Environmental Assistance Program

# Michigan Auto Body Environmental Compliance Workbook



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# Michigan Auto Body

## Environmental Compliance Workbook

This workbook has been designed to help you determine environmental compliance with the following areas of your auto body shop:

- Wastewater ..... [Part 1](#)
- Surface Preparation ..... [Part 2](#)
- Spray Gun Cleaning and On-site Solvent Recycling ..... [Part 3](#)
- Spray Painting..... [Part 4](#)
- Waste..... [Part 5](#)
- Motor Vehicle Air Conditioning (MVAC) Requirements ..... [Part 6](#)
- Secondary Containment ..... [Part 7](#)
- Spills ..... [Part 8](#)

**The Michigan Auto Body Environmental Compliance Workbook** explains the environmental protection requirements that apply to your shop and what you need to do if you are not in compliance. In addition, the workbook provides information regarding best management practices and pollution prevention techniques that can help you minimize human health risks and environmental impacts while saving money.

Embedded in the workbook are audit questions, which require “yes” or “no” answers about whether or not your shop is following the applicable environmental requirements. A blank “Return-to-Compliance Plan” form is provided as [Appendix H](#) at the back of the book. Complete the Return-to-Compliance Plan if your shop is not in compliance with a particular requirement. Assign Return-to-Compliance Plans to your employees to make the corrective actions.

Keep your completed workbook, including any Return-to-Compliance Plans, in your Department of Environmental Quality (DEQ) file. If a DEQ district staff person visits your shop, review the audit questions and plans with them. This review may answer many of their questions resulting in a more streamlined inspection.

If you have any questions while completing the audit questions, call the DEQ’s Environmental Assistance Program at 1-800-662-9278. Knowledgeable staff will be more than willing to help you.

*The **Michigan Auto Body Environmental Compliance Workbook** is intended for guidance only and may be impacted by changes in legislation, rules, and regulations adopted after the date of publication. Although the workbook makes every effort to teach users how to meet applicable compliance obligations, use of this workbook does not constitute the rendering of legal advice.*

*This workbook has been reviewed by a steering committee and outside reviewers. Diligent attention was given to assure that the information presented herein is accurate as of the date of publication; however, there is no guarantee, expressed or implied, that use of this workbook will satisfy all regulatory requirements mandated by laws and their respective enforcement agencies. Reliance on information from this document is not usable as a defense in any enforcement action or litigation. The state of Michigan shall be held harmless for any cause of action brought on as a result of using of this publication.*



# PART 1

## Wastewater

You are responsible for managing any waste, including wastewater, generated from your auto body shop. The discharge of improperly treated wastewater can result in both soil and water contamination and potentially cost your shop a great deal in cleanup costs and fines. This part will help you determine what type of wastewater you generate and how to dispose of it properly.

Most auto body shops generate both sanitary and non-sanitary wastewater.



- **Sanitary wastewater** is the wastewater from your restrooms, break rooms, and sinks. Sanitary wastewater does not include wastes generated from auto body repair activities or pouring waste fluids down the drain.
- **Non-sanitary wastewater** is the wastewater that results from your shop activities that contain one or more pollutants. It includes any wastewater generated from the washing of cars and shop floors, and laundering of towels and rags.

### ✓ AUDIT QUESTION

1.1. What type of wastewater does your shop generate?  Sanitary  Non-Sanitary  Both

## Where Does Your Wastewater Go?

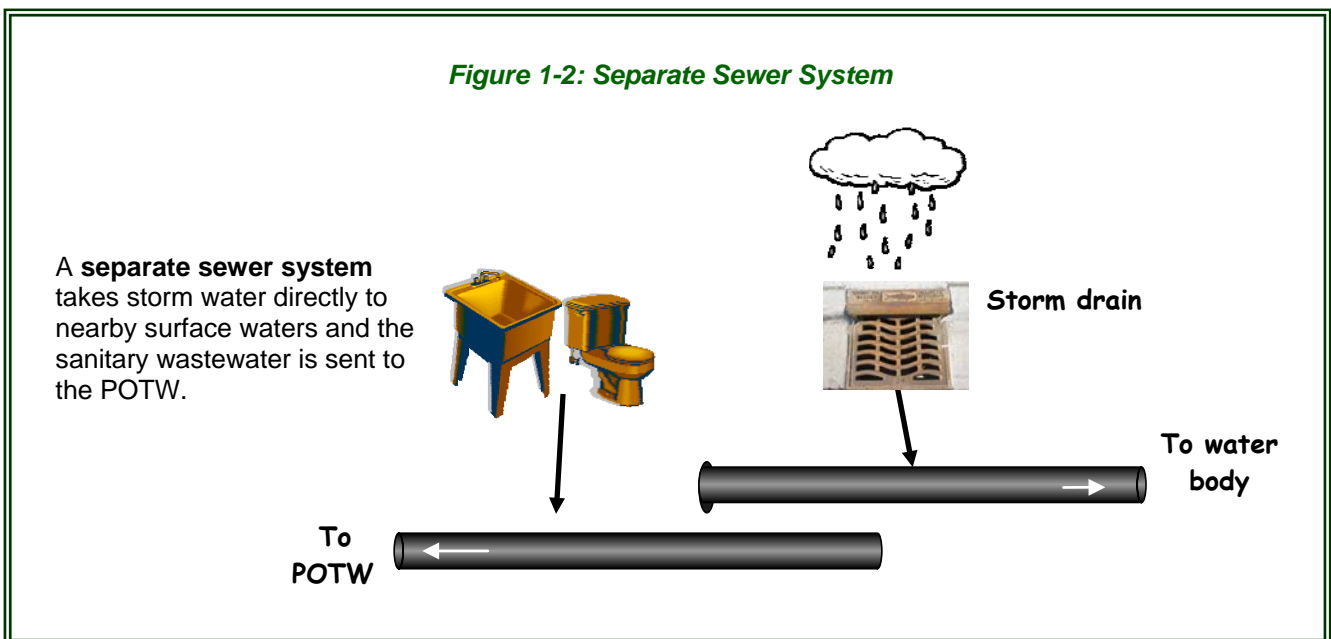
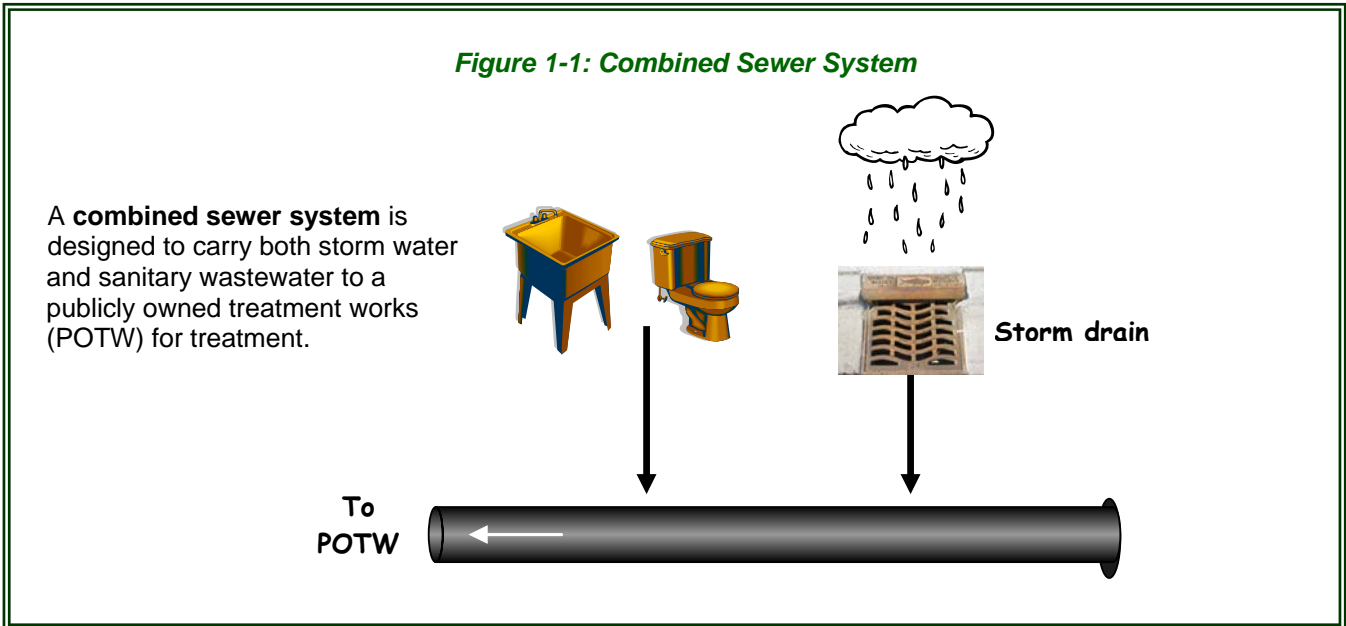
Determine which of the following ways your wastewater is disposed, and then complete the corresponding questions. Check all that apply.

- Municipal sewer system** – Questions 1.2 – 1.10
- On-site septic system** (for sanitary wastewater) – Questions 1.11 – 1.13
- Groundwater discharge** to grassy areas, drywells, infiltration basins, or outdoor seepage basins (for non-sanitary wastewater) – Question 1.14
- Holding tank** (the contents of which is hauled off-site by a licensed hauler to a disposal facility) – Questions 1.15 -1.19
- Surface water discharge** (includes direct discharge to ditch, river, lake, or stream) – Questions 1.20-1.21

After completing the questions in the appropriate sections above, continue with [“Pollution Prevention”](#) on page 6.

## Municipal Sewer System

There are two types of municipal sewer systems, generally referred to as "combined" and "separate" (see Figures 1-1 and 1-2 below).



✓ AUDIT QUESTIONS		
1.2. Have you determined if your shop is connected to a “combined” or “separate” sewer system?  <i>Learn and keep records that demonstrate the destination of drains and sewers on the property. If you cannot locate schematics of the building systems and do not know the destination of a drain or sewer, call your POTW, public works department, or sewer authority for guidance. You can also learn more from the US Environmental Protection Agency’s (USEPA’s) document, “Storm Water Management Fact Sheet: Non-Storm Water Discharges to Storm Sewers.” Go to <a href="http://www.epa.gov/npdes/pubs/nonstorm.pdf">www.epa.gov/npdes/pubs/nonstorm.pdf</a>.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
1.3. Are you discharging non-sanitary wastewater or liquid industrial waste such as antifreeze into a combined or sanitary sewer system?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Go to 1.7
1.4. Did you obtain authorization form your POTW to discharge?  <i>Generally, you will be required to fill out an application detailing what wastes you are requesting permission to discharge. Your sewer authority will review the application and notify you if you can or cannot discharge the waste to their treatment facility.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
1.5. Have you reviewed with your POTW any requirements for discharge such as monitoring, recordkeeping, sampling, and whether industrial pretreatment regulations apply?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
1.6. Are you complying with any pretreatment standards or other requirements established by your POTW before discharging wastewater to the sewer system?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
1.7. Is your shop connected to a separate sewer system?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Go to 1.10
1.8. Are you discharging non-sanitary wastewater or liquid industrial wastes such as antifreeze into the <b>storm sewer</b> ?	<input type="checkbox"/> Yes Complete RTC	<input type="checkbox"/> No
1.9. Are any of your floor drains connected to the storm sewer?	<input type="checkbox"/> Yes Complete RTC	<input type="checkbox"/> No
1.10. Are you following any of the best management practices listed in Table 1.1?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

**Table 1.1: BEST MANAGEMENT PRACTICES - NOT REQUIRED BUT RECOMMENDED**

- Trench drains should be cleaned periodically.
- Only rain water should enter storm sewers, so prevent sand and other debris from entering storm sewers. The basin at the bottom of the storm sewer allows for settling of sand and other debris. If the basin gets full, it can no longer treat the storm water within the separate storm sewer collection system. Periodically inspect the basins at the bottom of storm sewers to see if your preventative actions are working or whether the basin is full of debris. If debris and grit is present and the basin is over half full, arrange to have it cleaned out by an environmental spill response company (check your Yellow Pages).

## Discharges to the Ground

### Septic System (for Sanitary Wastewater)

When a municipal sewer system is not available, most facilities dispose of their sink and bathroom generated sanitary wastewater to an on-site sewage disposal system. Sewage disposal systems consist of a septic tank and a tile field and are designed to capture solids, provide some biological decomposition, and discharge the remaining wastewater to the ground and groundwater through the tile field.

Septic systems are designed to be used solely for disposal of sanitary wastewater. Non-sanitary wastewater discharges can destroy a septic system and turn the septage into a liquid industrial waste. **Do not discharge your non-sanitary wastewater into septic systems.** Septic tanks should be pumped out by a [DEQ licensed septic waste hauler](#) every two to three years, or when needed.

**If you have a septic system, you may only use it to discharge sanitary wastewater.**

✓ AUDIT QUESTIONS		
1.11. Do you only discharge sanitary wastewater to your septic system? <i>Sanitary waste includes only bathroom and break room wastewater.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
1.12. Do you dispose of non-sanitary wastewater (e.g., floor and car wash water) or liquid industrial waste (e.g., antifreeze) in toilets or sinks?	<input type="checkbox"/> Yes Complete RTC	<input type="checkbox"/> No
1.13. Do you have any floor drains connected to your septic system? <i>If you have floor drains, they should be rerouted to a holding tank or to the shop's non-sanitary wastewater collection/treatment system provided that the discharge is authorized in your discharge permit.</i>	<input type="checkbox"/> Yes Complete RTC	<input type="checkbox"/> No

### Groundwater Discharge (for Non-Sanitary Wastewater)

Some discharges of non-sanitary wastewater to the ground is allowed but only if authorized by the DEQ by permit. Below are two types of discharges common to auto body shops that are not connected to a municipal sewer system.

Power washing vehicles parked on an unpaved surface or a grassy area to knock off mud and dirt that does not involve detergent or additives does not require a groundwater permit from the DEQ. If detergents or additives are used according to manufacturer's specifications, then a permit is required.

A groundwater permit is required to discharge less than 2,000 gallons a day of wastewater from an indoor bay for car washing to a drywell (i.e., an outdoor basin where it will seep into the ground) or to a sub-surface infiltration system. This discharge may be covered under the "[General Permit for Vehicle Wash Not Open to the Public](#)" if washing is limited to the removal of non-polluting substances from the exterior of vehicles. A vehicle's exterior does not include the undercarriage. The portion of the vehicle being washed also must not have come in contact with solid, hazardous or liquid industrial waste.



If wastewater characteristics or on-site activities prevent you from applying for a general permit, a site-specific permit may be tailored for the shop. To be permitted, the shop must meet strict environmental standards prior to discharge to the ground or groundwater. This could include expensive treatment systems that include air stripping and/or carbon adsorption. In addition, a shop may have to include the following for pretreatment:

- An oil/water separator and a grit chamber (often used to prevent clogging of the infiltration system or equipment).
- A wastewater recycling system (to reduce the amount of wastewater generated).

To obtain authorization for a discharge of wastewater from power washing, car washing, or other wastewater to the ground, contact your DEQ Water Bureau district office ([Appendix A](#)), or the appropriate [Groundwater Permit Section staff](#). For additional information, go to [www.michigan.gov/deqwater](http://www.michigan.gov/deqwater) and select “Groundwater Discharge.”

✓ AUDIT QUESTION		
1.14. Did you receive authorization for discharges of non-sanitary wastewater to the ground (i.e., to drywells, infiltration basins, and/or infiltration fields) through a groundwater permit?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC

### Holding Tank

Wastewater, excluding septage waste, may be collected in a holding tank and then transported to a recycling or disposal facility. You may haul your non-sanitary wastewater, also known as liquid industrial waste, without being licensed by the Waste and Hazardous Materials Division (WHMD) if the requirements on [page 20](#) are met, or you may hire a permitted and registered hazardous or liquid industrial waste transporter. Liquid Industrial waste hauled by a permitted and registered transporter must have manifests accompanying the shipment (see page 19). Manifests are not required for septage waste hauled by licensed septage waste transporters. Licensed septage waste transporters cannot transport liquid industrial or hazardous waste.

✓ AUDIT QUESTIONS		
1.15. Are you adhering to the storage requirements on pages 23-24 while your liquid industrial waste is being stored on-site?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
1.16. Are you transporting the liquid industrial waste from the holding tank to the recycling or disposal facility?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Go to 1.18
1.17. Are you complying with all of the self-transporting requirements on <a href="#">page 20</a> ?	<input type="checkbox"/> Yes Skip 1.18 & 1.19	<input type="checkbox"/> No Complete RTC Skip 1.18 & 1.19
1.18. Is the wastewater pumped out and hauled away by a permitted and licensed hazardous or <a href="#">liquid waste transporter</a> ?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
1.19. Is the shipment of liquid industrial waste manifested? (See <a href="#">page 19</a> for <i>manifest requirements</i> .)	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC

## Surface Water Discharge

The DEQ and the USEPA regulate direct discharges to surface water. You are “directly discharging” to the surface water if your wastewater goes to any lake, stream, river, county drain, roadside ditch, or local storm sewer that goes to a lake, stream, etc.



Your auto body shop cannot directly discharge wastewater legally to surface water, unless you have been issued a wastewater discharge permit called a National Pollutant Discharge Elimination System (NPDES).

### ✓ AUDIT QUESTIONS

- 1.20. Did you obtain an NPDES Permit before discharging any wastewater to surface waters?  Yes  No Complete RTC
- 1.21. Do you have any floor drains that are connected to a storm sewer that empties to a ditch, river, stream, or other body of water?  Yes Complete RTC  No
- Learn and keep records that demonstrate the destination of drains and sewers on the property. If you cannot locate schematics of the building systems and do not know the destination of a drain or sewer, call your POTW, public works department, or sewer authority for guidance. You can also learn more from the USEPA’s document, “Storm Water Management Fact Sheet: Non-Storm Water Discharges to Storm Sewers.” Go to [www.epa.gov/npdes/pubs/nonstorm.pdf](http://www.epa.gov/npdes/pubs/nonstorm.pdf).*

## Pollution Prevention

### ✓ AUDIT QUESTION

- 1.22. Are you following any of the best management practices listed in Table 1.2?  Yes  No

**Table 1. 2: BEST MANAGEMENT PRACTICES - NOT REQUIRED BUT RECOMMENDED**





- Keep your establishment clean. Prevent spills and leaks that may add contaminants to floor rinse waters.
- Minimize your shop’s water usage. Using less water means less wastewater to manage.
- Run a Dry Shop. A dry shop uses no water, or very little water, to clean floors.
  -  Do not wash the floors or use wet mops to clean up spills.
  -  Clean up small spills with rags. Do not saturate rags.
  -  If the spills are solvents, use appropriate absorbents to clean the spill and dispose of the absorbents as hazardous waste.
- Only rain water should enter a storm sewer, so prevent sand and other debris from entering the storm sewers in the parking lot outside of the facility (yet on the facility property). A settling basin at the bottom of the storm sewer allows for settling of sand and other debris. If your basin gets full, then it is no longer helping treat the storm water within the separate storm sewer collection system.
- Periodically inspect the basins at the bottom of storm sewers to see if your preventative actions are working or whether your basin is full of debris. If debris and grit is present and your basin is over half full, then arrange to have it cleaned out by an environmental spill response company (check your Yellow



Table 1. 2: BEST MANAGEMENT PRACTICES - NOT REQUIRED BUT RECOMMENDED	
Pages).	
<input type="checkbox"/> Train staff on good housekeeping skills. At the end of the day, spend 15 minutes cleaning up materials.	
<input type="checkbox"/> Consider the purchase of storm sewer grates that reinforce your employee training program.	

### Annual Wastewater Reporting

A completed Annual Wastewater Report (AWR) must be submitted to the DEQ by every shop doing business within the state that either discharges wastewater to a combined or sanitary sewer system or to waters of the state (i.e., rivers, lakes and streams). Wastewater reports are due every year on August 1.

**“Wastewater”** means all liquid waste discharged resulting from industrial or commercial processes, including contact cooling and condensing waters, **but excluding** noncontact cooling water, sanitary sewage, and storm water runoff that does not come in contact with process materials, products, or byproducts.

✓ AUDIT QUESTION	
1.23. Do you discharge any “wastewater” from your auto body shop to a combined or separate sewer system or waters of the state? (See definition of wastewater above.)	<input type="checkbox"/> Yes <input type="checkbox"/> No Go to Part 2

### Do I Submit the Abbreviated or Full Wastewater Report?

Companies that discharge wastewater (as defined above) to a combined or sanitary sewer system or waters of the state must submit either an *Abbreviated Wastewater Report* or a *Full Wastewater Report*. Which report you submit depends on whether or not you **use** or **discharge** a critical material. The most common critical materials at an auto body shop are solvents. Therefore, to simplify, all solvents will be considered a critical material.

Complete the FULL wastewater report if you:

- Use over 7.0 gallons of solvents in a year, **OR**

Complete the ABBREVIATED wastewater report if you:

- Do not use solvent or use less than 7.0 gallons of solvents in a year.

**If the wastewater from your auto body shop is collected and hauled away, you do not have to submit an Annual Wastewater Report.**

The *wastewater report* is submitted on forms provided by the DEQ. For more information about the AWR, including the wastewater report forms and instructions, go to [www.michigan.gov/deq](http://www.michigan.gov/deq) (select “Water,” then “Surface Water,” and “Annual Wastewater Reporting”) or contact the Environmental Assistance Center at (800) 662-9278.

✓ AUDIT QUESTION	
1.24. Have you been submitting either an Abbreviated or a Full Annual Wastewater Report to the DEQ?	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete RTC

# PART 2

## Surface Preparation



Surface preparation and resurfacing operations conducted on vehicles are types of activities that generate particulate emissions (dust). Disc sanders used to remove paint and body filler from cars generate dust that could potentially travel beyond the property of your shop. Travel of dust, known as fugitive dust, is a form of air pollution and is regulated and must be minimized.

The regulations described in this part are not specifically aimed at reducing worker exposure to air contaminants in the work place, but rather at protecting the public and environment from air contaminants. Regulations protecting workers from the inhalation of air contaminants within the work place are administered by the Michigan Department of Labor and Economic Growth (DLEG). See [Appendix C](#) for a summary of the worker health and safety requirements.

### ✓ AUDIT QUESTIONS

2.1. Do you perform all of your vehicle sanding inside the shop building?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
2.2. Do you minimize dust buildup inside the shop by vacuuming or sweeping dust off floors on a routine basis?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
2.3. Do you use a central vacuum system to collect dust from ventilated sanders?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Skip to 2.5
2.4. Is the central vacuum system equipped with a properly operating dust control device such as a fabric filter?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
2.5. Do you place collected dust into leak-proof containers for disposal?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
2.6. Do you follow any of the best management practices listed in Table 2.1?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

**Table 2.1: BEST MANAGEMENT PRACTICES - NOT REQUIRED BUT RECOMMENDED**

- Use rotary/orbital and/or straight line/reciprocating sanders, equipped with high velocity, low volume (HVLV) local exhaust ventilation.
- Install retractable flexible hosing attached to a central vacuum system equipped with a dust control device.
- Do not use paint strippers containing dichloromethane (methylene chloride) or if one must be used, choose one with a low methylene chloride content. Sand the area before applying the paint stripper. This will reduce the amount of paint stripper needed and improve the penetration of the material into the coating layers.

# PART 3

## Spray Gun Cleaning and On-site Solvent Recycling

All shops should minimize the amount of paint thinner and solvent they use in cleaning their spray guns. Recycling solvent through a still will reduce the amount of solvent you need to purchase and dispose, thus saving you money.

### Paint Spray Gun Cleaning



Some shops use enclosed automatic gun washers to clean their equipment, others clean their spray guns by hand. Either option is acceptable provided some simple procedures are followed.



✓ AUDIT QUESTIONS	
3.1. Do you operate a spray gun washer?	<input type="checkbox"/> Yes <input type="checkbox"/> No Go to 3.3
3.2. Are you doing all of the following? <input type="checkbox"/> Keep the paint gun washer covered with a lid when not in use. <input type="checkbox"/> Clean parts and let them dry in a basket or on a rack for at least 15 seconds. <input type="checkbox"/> Close cover when allowing parts to soak. <input type="checkbox"/> Waste solvent and sludge generated from the gun washer are considered hazardous waste and therefore you must meet the hazardous waste storage and disposal requirements on pages 23-26. <input type="checkbox"/> Close cover after use. <input type="checkbox"/> Post operating procedures near the paint gun washer.	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete RTC
3.3. Do you spray paint thinner from your paint spray guns into the paint booth filters as a method of disposing the waste thinner?  <i>For proper disposal of hazardous waste, including paint booth filters and waste paint thinner, see Part 5.</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete RTC
3.4. Are you following any of the best management practices listed in Table 3.1?	<input type="checkbox"/> Yes <input type="checkbox"/> No

**TABLE 3.1: BEST MANAGEMENT PRACTICES - NOT REQUIRED, BUT RECOMMENDED**

**Pollution Prevention**

- Two-stage cleaning will extend the life and effectiveness of the cleaning solvent. Empty the paint pot as much as possible, then:
  -  First Stage: rinse paint pot and equipment with used solvent.
  -  Second Stage: clean paint equipment with clean solvent.

When the two-stage system stops cleaning effectively, replace the first stage solvent with the second stage solvent. Then, replace the second stage solvent with fresh solvent and recycle the waste solvent.
- Use disposable paint pot liners. Most of the solvent used for spray equipment cleaning is used to remove residual coating from the paint pot. If pot liners are used, the residual coating cures in the liner and is disposed of as a solid waste.
- Use an alternative cleaning technology such as water-based and citrus-based cleaning solutions and cleaning equipment.



**On-site Solvent Recycling**

To reduce solvent purchases and waste disposal costs, some auto body shops have installed solvent distillation units to recover and reuse solvent.

**✓ AUDIT QUESTIONS**

3.5. Do you operate a solvent distillation unit?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Go to Part 4
3.6. Are you doing all of the following?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
<input type="checkbox"/> Still bottoms are considered hazardous waste and therefore you must meet the storage and disposal requirements on pages 23-26. Still bottoms must be included in the calculation of your monthly hazardous waste generation, as well as the initial amount of spent solvent put into the still and all subsequent amounts of new solvent added to replenish the amount lost.		
<input type="checkbox"/> The still must be approved or listed in accordance with <a href="#">UL 2208 Standard for Solvent Distillation Units</a> .		
<input type="checkbox"/> The still must be located according to manufacturers' instructions and away from ignition sources.		
<input type="checkbox"/> Only use with materials specifically listed on the still label or in the instruction booklet.		
<input type="checkbox"/> The still must meet local fire department requirements.		
<input type="checkbox"/> If the capacity of the solvent still is greater than 55 gallons, a state air permit is required prior to the installation of the unit. For information about the permit requirement, contact the DEQ's Environmental Assistance Program at (800) 662-9278.		



## PART 4

### Spray Painting



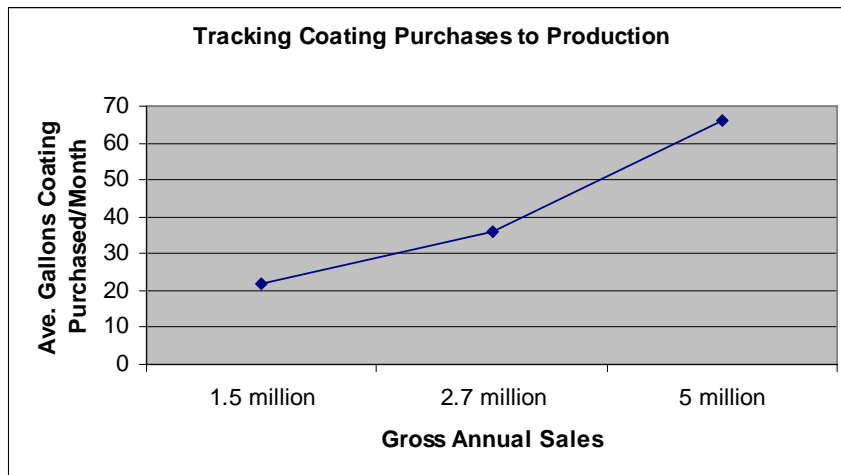
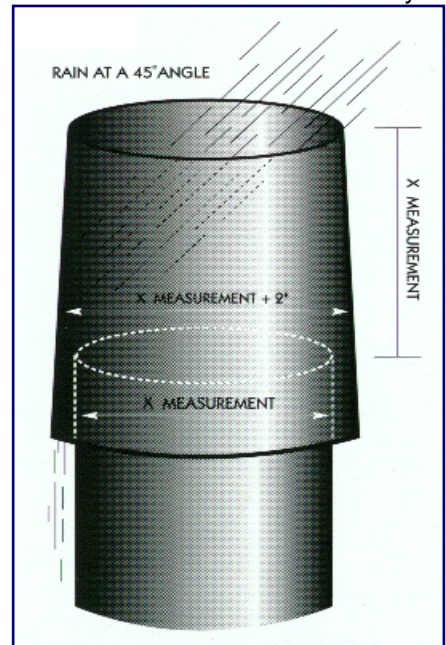
Spray painting emits volatile organic compounds (VOCs) and particulate matter or overspray. Body shops must minimize the amount of paint sprayed and ensure good capture of the overspray. This will result in a more efficient use of your coatings and avoid causing a nuisance and/or damage to your neighbor's property.

#### ✓ AUDIT QUESTIONS

- 4.1. Do you spray less than 200 gallons of coating (including thinners) per month?  Yes  No  
*If expected to exceed 200 gallons on any given month, you will need to obtain a state air permit. Contact the DEQ's Environmental Assistance Program at (800) 662-9278 if you have questions relating to the permit requirement or need a permit application.*  
Go to [Part 5](#).  
You cannot use this part of the audit
- 4.2. Do you keep records on file of the actual monthly coating usage for the most recent two-year period?  Yes  No  
*Most auto body shops utilize a computer mixing system which may be used to compile your coating usage records for each month. You can print out your monthly coating usage and save in a file to stay in compliance with the recordkeeping requirement.*  
Complete RTC  
*A "[Monthly Coating Recordkeeping Form](#)" developed by the Environmental Assistance Program can be used to comply with the recordkeeping requirement. To obtain a copy, contact the Program at (800) 662-9278 or go to [www.michigan.gov/deqair](http://www.michigan.gov/deqair), click on "Clean Air Assistance," "Air Permit," and the form is titled "Rule 287(c) Permit to Install Exemption Record: Surface Coating Equipment."*
- 4.3. Is the exhaust from the spray area or booth equipped with particulate control, such as filters?  Yes  No  
Complete RTC
- 4.4. Do you following any of the best management practices listed in Table 4.1?  Yes  No

**TABLE 4.1: BEST MANAGEMENT PRACTICES - NOT REQUIRED, BUT RECOMMENDED**

- Routine maintenance of the spray booth filters should be scheduled. If these filters are not routinely changed then they will become saturated with paint, which means that contaminants normally trapped will bypass the filter, go up the stack and into the environment.
- Keep all coating and thinner containers closed when not in use.
- Exhaust air from the spray booth should be discharged unobstructed vertically upwards. Good engineering design of the stack height is 1 ½ times the building height. Rain sleeves (see adjacent figure), not rain caps should be installed on exhaust stacks. The sleeves provide better dispersion and dilution of the air contaminants than the caps.
- Use high volume low pressure (HVLP) spray gun technology.
- Use waterborne basecoats.
- Train staff on proper operation of spray guns to minimize overspray.
- Track the amount of coating purchased per month against gross sales. Shops that efficiently apply their paints stay below the line in the chart below. If your numbers are above the line, you may be wasting paint.





# PART 5

## Waste

Your legal responsibility as a generator of any quantity of waste extends from “cradle to grave.” This covers the time from when the waste was first generated through its ultimate disposal. This part of the audit identifies requirements you must have in place before shipping certain wastes offsite as well as the storage and disposal of your waste.



There are three major categories of wastes generated at auto body shops:

### 1. Solid Wastes

- Garbage
- Rubbish
- Office paper
- Corrugated cardboard
- Wood pallets
- Plastic
- Clean containers
- Scrap metal
- Scrap tires

### 2. Liquid Industrial Waste

- Used oils/used filters
- Used coolants/antifreeze that is not a hazardous waste
- Combined, storm, and sanitary sewer clean-out residue
- Wastewater

### 3. Hazardous Waste

The following are common types of hazardous waste generated at an auto body shop. Many of these can and should be recycled and/or reused.

- **Paint thinners** used for spray gun cleaning– are hazardous waste for ignitability and toxic solvents.
- **Waste paints** – are hazardous wastes for ignitability and toxic solvents and metals.
- **Bottoms from part cleaners and solvent distillation units, and paint booth filters** – are hazardous wastes because they may contain toxic solvents or metals.
- **Waste aerosol cans that are not completely empty** – aerosols like brake cleaner, carburetor cleaner, other degreasers commonly found at auto body shops are often hazardous for the chlorinated solvents they contain or for ignitability. When discarded with unused contents, they are hazardous waste.
- **Windshield glass** – may be hazardous waste based on the amount of lead content in the glass.

**These materials are NOT hazardous waste IF RECYCLED.** If you do NOT recycle these wastes, they are assumed to be hazardous waste.

- Gasoline (only as a fuel)
- Lead acid batteries and lead scrap
- Contaminated shop towels, wipes, and rags (if laundered and textiles only)
- Fluorescent/High Intensity Discharge (HID) light bulbs and mercury switches

## How Much Hazardous Waste Do You Generate?

This part only applies to auto body shops that are Conditionally Exempt Small Quality Generators (CESQG) of hazardous waste. A CESQG is a facility that generates less than 220 pounds of hazardous waste per month. The majority of auto body shops are CESQG. **If you generate more than 220 pounds of hazardous waste per month, please do not proceed any further and contact the Michigan Department of Environmental Quality's (DEQ's) Waste and Hazardous Materials Division (WHMD) (see [Appendix A](#)) for assistance.**

You can use the table below to enter how much hazardous waste is generated monthly or use a log sheet by the waste containers (see sample at the bottom of the page). You can use the hazardous waste worksheet on page 15 to help you estimate how many pounds of hazardous waste your facility generates in an average month. Once you determine how much hazardous waste you generate on a monthly basis, you can answer Audit Question 5.1

Hazardous Waste Generated per Month		
January	_____	lbs.
February	_____	lbs.
March	_____	lbs.
April	_____	lbs.
May	_____	lbs.
June	_____	lbs.
July	_____	lbs.
August	_____	lbs.
September	_____	lbs.
October	_____	lbs.
November	_____	lbs.
December	_____	lbs.

Hazardous Waste Generated per Month (Example)		
January	75	lbs.
February	75	lbs.
March	100	lbs.
April	125	lbs.
May	100	lbs.
June	75	lbs.
July	75	lbs.
August	100	lbs.
September	100	lbs.
October	125	lbs.
November	100	lbs.
December	125	lbs.

### Sample Waste Log

Solvent Still Bottoms			
Date waste added:	How much added:	By:	Running monthly total
7/3/07	8 lbs	George G.	8 pounds
7/15/07	7 lbs	George G.	15 pounds
8/1/07	9 lbs	Sammy	9 lbs

Notice the new month's total

**✓ AUDIT QUESTION**

5.1. Does your shop generate less than 220 pounds of hazardous waste per month?  Yes  No - Go to Part 6. You cannot use this part of the audit.

### Hazardous Waste Worksheet

Note: The following worksheet provides only an approximation of the amount of waste you might generate.

Hazardous Waste	Monthly Generation		
	Gallons	lbs/gallon*	Pounds
Spent solvent <i>(do not include spent solvents that are reclaimed and returned to the auto body shop's process for reuse)</i>	<input type="checkbox"/> Spent Solvents ( <i>solvent degreasers, spray gun cleaning solvent</i> )		x ___ =
	<input type="checkbox"/> Other spent solvents ( <i>brake or carburetor cleaner, etc.</i> ) ( <i>flash point below 140° F</i> )**		x 7 =
Unused products which are to be discarded	<input type="checkbox"/> Unused Solvents ( <i>examples above</i> )		x ___ =
	<input type="checkbox"/> Other unused liquids ( <i>unused mixed paint</i> ) that are hazardous		x 8 =
	<input type="checkbox"/> Other unused solids that are hazardous		
Used Antifreeze/Coolants that is a hazardous waste			x 7 =
Used Spray Booth Filters			
Windshields (containing lead)			
Still bottoms from solvent distillation unit			
Solvent soaked rags or towels that are <u>not</u> being sent to a commercial cleaning service or cleaned on-site for reuse			
Fluorescent tubes; lead acid and dry cell batteries; thermometers, thermostats, switches, and other devices that contain mercury; computers; and electronic office equipment all of which are not being recycled.			

\* Multiply the number of gallons generated by this number to determine the number of pounds generated.

**TOTAL:**

--

\*\*Solvents with a flash point above 140°F are not considered a hazardous waste if not mixed with other hazardous waste or do not have other hazardous waste characteristics. Manage as a liquid industrial waste. Contact your WHMD district office for disposal requirements.

**HAZARDOUS WASTE WORKSHEET EXAMPLE**

Hazardous Waste	Monthly Generation		
	Gallons	lbs/gallon*	Pounds
Spent solvent <i>(do not include spent solvents that are reclaimed and returned to the auto body shop's process for reuse)</i>	<input type="checkbox"/> Spent Solvents <i>(solvent degreasers, spray gun cleaning solvents)</i>	10	x 7.5 = 75.5
	<input type="checkbox"/> Other spent solvents <i>(brake or carburetor cleaner, etc.) (flash point below 140° F)**</i>	3	x 7 = 21
Unused products which are to be discarded	<input type="checkbox"/> Unused Solvents (examples above)		x ___ =
	<input type="checkbox"/> Other unused liquids <i>(unused mix paint)</i> that are hazardous	3	x 8 = 24
	<input type="checkbox"/> Other unused solids that are hazardous		
Used Antifreeze/Coolants that is a hazardous waste		x 7 =	
Used Spray Booth Filters			20
Windshields (containing lead)			10
Still bottoms from solvent distillation unit			15
Solvent soaked rags or towels that are <u>not</u> being sent to a commercial cleaning service or cleaned on-site for reuse			
Fluorescent tubes; lead acid and dry cell batteries; thermometers, thermostats, switches, and other devices that contain mercury, computers; and electronic office equipment all of which are not being recycled.			
			<b>TOTAL:</b> 165.5

\* Multiply the number of gallons generated by this number to determine the number of pounds generated.

\*\*Solvents with a flash point above 140° F (e.g.,) are not considered a hazardous waste if not mixed with other hazardous waste or do not have other hazardous waste characteristics. Manage as a liquid industrial waste. *Contact your WHMD District Office for disposal requirements.*

**This is the amount of hazardous waste generated in the month.**

**✓ AUDIT QUESTIONS**

5.2. Do you keep records that show how you determined that your waste is a non-hazardous or hazardous waste? *For example, you may use a MSDS that shows the flashpoint of the substance is above 140 F.*  Yes  No Complete RTC

5.3. Do you keep records of the amount of hazardous waste you generated each month?  Yes  No Complete RTC




## Minimize Waste and Reduce Costs

In 2006, Mason Auto Body Repair, located in Mason, Michigan made the decision to switch their lighting from T12 high output fluorescents to T5 fluorescent light bulbs. The shop has seen a \$4,000 year savings by making this switch. The total cost of switching to T5s was \$16,000 (including installation) and that was offset by a \$3,800 Energy Policy Act federal tax credit. Their return on the T5 investment is just over 3 years. According to the owner, Bruce Wigginton, “Not only are we saving money by switching to T12s but we also have better lighting in our auto body shop for our mechanics and customers.”

Implementing the best management practices identified above and in Table 5.1 below will help you minimize the amount of waste your shop generates and save you money.

**TABLE 5.1: BEST MANAGEMENT PRACTICES - NOT REQUIRED, BUT RECOMMENDED**

A business owner or manager can conduct a **waste survey** to properly identify many types and quantities of waste and determine how to reduce waste generation. When you conduct your waste survey:

- Tour the entire shop and ask employees questions about work processes and the waste generated. Identify what is regulated as a hazardous waste, what can be managed as a solid waste, and how much waste is generated. Ask for suggestions about how waste could be reduced. Consider all wastes that are being generated from the different shop areas, including the office.
- Determine if on-site recycling would be cost effective. If you are interested in recycling on-site, check the regulations and contact the [Environmental Assistance Program](#) at (800) 662-9278.
- Observe if employees are creating more hazardous waste by mixing other waste with known hazardous waste. For example, your business can reduce the volume of hazardous waste by placing non-hazardous used oils and other fluids in the same container separate from the hazardous waste. Also, doing so will usually make recycling easier and disposal less expensive.
- Relocate any materials that are stored outside to either a shed or inside your shop. This will eliminate the possibility of contaminating storm water, which would require you to handle the contaminated storm water as liquid industrial waste or hazardous waste.
- Once you know where your wastes are being generated, you may be able to reduce your disposal costs by implementing waste reduction and recycling programs at your shop. Not only will you save money on disposal costs, you might save money by purchasing less material and even earn money from selling the collected materials, such as used oil, batteries or scrap steel. You need to have both management and worker support to have these programs work.
- Waste reduction** involves implementing activities which result in less waste being generated. These activities include the following:
  -  Use materials on a “first in, first out” basis so products do not become too old to use.
  -  Establish an incentive program which encourages workers to suggest ways to reduce waste. (Example: based on the cost savings and payback associated with the employee suggestion, the employee receives a percentage as a monetary incentive)
  -  Train employees in waste reduction methods.

**Table 5.1: BEST MANAGEMENT PRACTICES - (continued)**



**Recycling** consists of removing materials from the waste stream and making them into other usable goods. It can also refer to the reclamation of waste materials for reuse in the process (i.e., waste solvent). One step in recycling you can easily do at your shop involves the collection of those materials. The collected materials are then marketed through private brokers, local community recycling programs, or directly to recycling companies who utilize the materials in their manufacturing processes. Check with your recycler to find out what they accept, how the materials must be prepared, and other collection details. It may be necessary to use different brokers or several different recycling programs to market your collected materials because the individual broker or program might not handle the type or volume of material your shop generates. Recyclers are listed at [www.michigan.gov/deqrmmd](http://www.michigan.gov/deqrmmd) in the “Recycled Materials Market Directory.”

**Site Identification Numbers**

Shops that ship hazardous and liquid industrial wastes off-site must obtain a unique site identification number. The number is used on the shipping manifests given to you by your waste transporter (see discussion beginning on page 19). Your site identification number will begin with one of the following prefixes: MIK, MIR, MID, MIT, MIE, MIO, or MIG. A new site identification number is required every time the owner of the shop changes or if the shop moves to a different location. If you have questions pertaining to using an existing site identification number, contact your WHMD district office ([Appendix A](#)) or you may look up your site identification number using the “Waste Data System (WDS)” at [www.deq.state.mi.us/wdsp](http://www.deq.state.mi.us/wdsp).

To obtain a site identification number, it is recommended you apply on-line at [www.michigan.gov/mitaps](http://www.michigan.gov/mitaps) (select “Apply for Permits”) or you may download the blank form and directions at [www.deq.state.mi.us/deqforms](http://www.deq.state.mi.us/deqforms) (search for EQP 5150) and then mail the form and payment to the DEQ address on the form. There is a fee to obtain a number. If you need help with applying for a number, contact the [Environmental Assistance Program](#) at (800) 662-9278.

MAIL TO: Waste Management Division Dept. of Environmental Quality Notification Unit PO BOX 30261 Lansing, MI 48909-7741 (800) FAX TO: 517-373-4797		MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY WASTE MANAGEMENT DIVISION <b>SITE IDENTIFICATION</b> <small>Required under authority of the Natural Resources and Environmental Protection Act, 1994 PA 401, as amended. Failure to submit this information may result in civil or criminal penalties.</small>								
I. The form is being submitted. (See instructions on page 6) CHECK CORRECT BOXES		as initial notification, to either obtain a Site Identification Number or to submit a one-time notification as subsequent notification, to change or update site information or to submit a one-time notification as a component of a Hazardous Waste Permit Part A, as a component of the Hazardous Waste Report (biennial report)								
II. Site's ID Number		A. Identification (ID) Number:								
III. Name of Site (see instructions on page 7) TYPE OR PRINT CLEARLY		A. Legal company name:								
		B. Site Specific Name (dba):								
IV. ANICS Code for the Site (see instructions page 7) TYPE OR PRINT CLEARLY		A.	B.							
		C.	D.							
V. Site Location Information (see instructions on page 7) TYPE OR PRINT CLEARLY		Street Address:								
		City, Town, or Village:	State:							
		Province or Subdivision:	Country:							
		County Name (MI only):	Zip Code or Postal Code:							
		Site Tax Identification Number:	Number of Employees:							
VI. Site Mailing Address (see instructions on page 8) TYPE OR PRINT CLEARLY		Mailing Name (if different than Name of Site):								
		Street or P. O. Box:								
		City, Town, or Village:	State:							
		Province or Subdivision:	Country:							
		Zip Code or Postal Code:								
VII. Site Contact Person (instructions on page 8) TYPE OR PRINT CLEARLY		First Name:	MI:	Last Name:						
		Phone Number:	Phone number extension:							
VIII. Indian Reservation (see instructions on page 9) TYPE OR PRINT CLEARLY		Facility on Indian Reservation Land:		yes no						
IX. Owner and/or Operator of Site (see instructions on page 9) TYPE OR PRINT CLEARLY		A. Name of Site's Legal Owner Operator:		Date became owner and/or operator (mm/dd/yyyy):						
		Name:								
		Type (check one):	Private	County	District	Federal	Indian	Municipal	State	Other
		B. Name of Site's Legal Owner Operator:		Date became owner and/or operator (mm/dd/yyyy):						
		Name:								
		Type (check one):	Private	County	District	Federal	Indian	Municipal	State	Other

**✓ AUDIT QUESTION**

5.4. Does your shop have a site identification number?  Yes  No Complete RTC

## Manifests and Shipping Records

Manifest forms are designed to track hazardous and liquid industrial waste shipments from their point of generation to their final destination (e.g., recycler; hazardous waste treatment, storage, and disposal shop (TSDF); or other disposal company – all referred to as “designated facility” in this guidance). The DEQ does not require manifests for solid waste shipments. You should either have a manifest or the following receipt for each shipment of hazardous or liquid industrial waste that is hauled away from your shop. If your transporter does not provide a copy of the manifest it may be collected under a consolidated manifest, in which case they must provide you with a receipt that lists the following:

- Name and address of the auto body shop and the facility where the waste is being taken.
- Amount and type of waste shipped off-site.
- Date of pick up.
- The consolidated manifest number being used by the transporter.
- Driver’s signature
- Transporter’s company name

If you have any questions about manifests, contact the Environmental Assistance Program at (800) 662-9278.

### ✓ AUDIT QUESTIONS

The following questions only apply to hazardous and liquid waste that is picked up a waste transporter. If you haul all of your wastes to a designated facility, do not answer Questions 5.5 - 5.8.

5.5. Does each shipment of hazardous waste or liquid industrial waste have a manifest or receipt from the transporter that identifies the manifest number and type of waste shipped?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.6. Is the waste properly listed on the manifest form and is the quantity shipped entered on the manifest form as identified in the <a href="#">manifest form instructions</a> ?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.7. Has a copy of each manifest been signed by the transporter and submitted to the DEQ’s WHMD by the 10 <sup>th</sup> of the month following the shipment? (See diagram on page 21.)	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.8. Are all copies of the manifest that are signed by the generator, hauler, and designated facility kept on file for at least three years?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC

### Where Can I Get Manifests and Instructions?

Usually your waste transporter or designated facility will provide you with the manifest and help you fill it out. Instructions and ordering information from USEPA approved printers are available at [www.michigan.gov/deqwaste](http://www.michigan.gov/deqwaste). You must use the USEPA “Uniform Hazardous Waste Manifest” (Form 8700-22) for hazardous and liquid industrial waste shipments as of September 6, 2006.

## Hauling Your Own Wastes

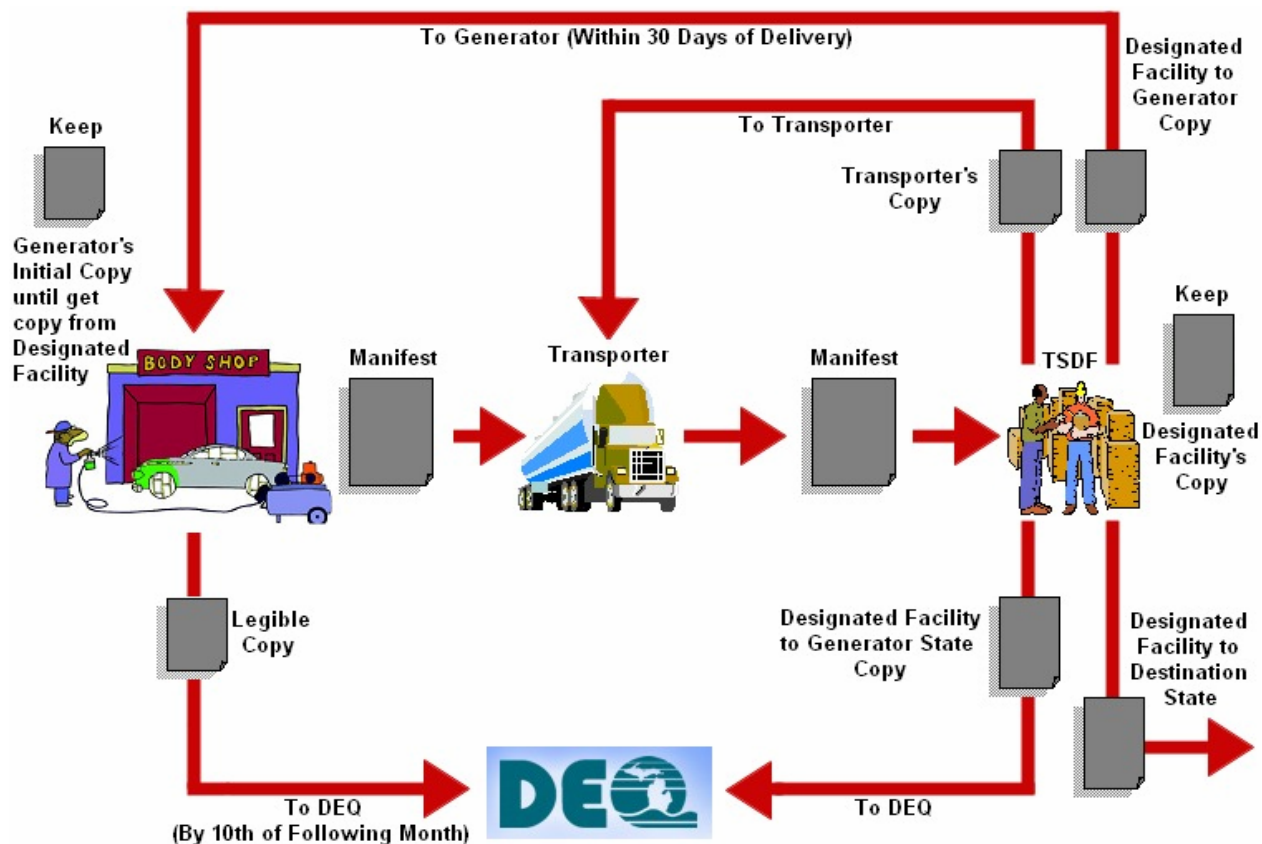
An auto body shop can haul their own used oil and other waste liquids to a designated facility provided they meet certain conditions.

### ✓ AUDIT QUESTIONS

5.9. Do you haul your used oil, other liquid industrial wastes, or hazardous waste to a designated facility?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Skip 5.10-5.20
5.10. Does a record with your shop's name and address, type and quantity of liquid industrial waste and/or hazardous waste and where the wastes are being transported accompany the waste shipment?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.11. Do you obtain a signature from the designated facility acknowledging receipt of the liquid industrial waste and/or hazardous wastes and provide a copy of the record to that designated facility?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.12. Do you keep a copy of the shipment records for at least three years?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.13. Did you confirm with your insurance company that your auto body shop has adequate coverage if the shop is involved in an accident?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.14. Do you haul more than 55 gallons of liquid industrial waste or hazardous waste at one time?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Skip 5.15-5.20
5.15. Have you notified the DEQ's WHMD about hauling your own liquid industrial waste and/or hazardous waste?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.16. Do you use manifests?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.17. Did you obtain a copy of form MCS-90 (endorsement for motor carrier policies of insurance for public liability under Section 29 or 30 of the Motor Carrier Act of 1980) from your insurance company and submit the form to:  DEQ WHMD Attn: Transportation Program Technician Southeast Michigan District Office 27700 Donald Court Warren, MI 48092-2793	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.18. Is your vehicle under 10,000 pounds gross vehicle weight?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Go to 5.20
5.19. Do you have fleet insurance coverage of at least \$300,000.	<input type="checkbox"/> Yes Skip 5.20	<input type="checkbox"/> No Complete RTC Skip 5.20
5.20. For vehicles equal to 10,000 pounds gross vehicle weight or more, the shop must have fleet insurance coverage of at least \$750,000. Do you have fleet coverage of at least \$750,000?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC



### MANIFEST PROCEDURE FOR SHIPMENTS WITHIN MICHIGAN



1. Complete the manifest forms using the instructions provided at [www.michigan.gov/deqwaste](http://www.michigan.gov/deqwaste).
2. Your transporter will sign the manifest forms and provide you with the generator's initial copy. You must submit a legible copy to the WHMD within 10 days after the end of the month in which you shipped the waste. The generator's initial copy should be kept in your records until you receive a copy of the manifest from the designated facility.\*
3. The designated facility will sign the manifest forms and provide the transporter with a copy.
4. The designated facility will send you a copy of the manifest form with the transporter and designated facility signature within 35 days. When you receive that copy, you can recycle the copy you received from the transporter. The designated facility will also send a copy of the manifest to the DEQ.

**NOTE:** If the waste was shipped out of state you will need to:

- a. Meet the receiving state's requirements.
- b. Submit a copy of the manifest to the WHMD as in Step 2 above.

\* If the transporter gives you the first page of the manifest to send to the DEQ, strike out the line "Designated Facility to Destination State (If Required)" and write in "Generator Copy."

## What Should I Do if I Don't Receive My Copy of the Manifest from My Designated Facility?

Contact the transporter and designated facility to determine the status of your shipment if you have not received a copy of the manifest from your designated facility within 35 days. If you still have not received the manifest copy within 45 days after the waste was shipped, file an exception report with the WHMD. An exception report is a copy of the manifest and a letter explaining what contacts you have had with the transporter and designated facility and any information you have regarding the shipment.

Exception reports to the DEQ, WHMD should be mailed to:

MDEQ WASTE & HAZARDOUS MATERIALS DIVISION  
MANIFEST UNIT  
PO BOX 30038  
LANSING MI 48909-7538

## Selecting a Transporter and Designated Facility

Transporters and designated facilities can assist you by reviewing the manifest for correct and complete information, providing information on designated facility options and costs, and providing for the safe and timely transport of your wastes. Transporters may be independent companies or may be affiliated with a designated facility. A listing of permitted and licensed transporters is available via the DEQ's web site [www.michigan.gov/deqwaste](http://www.michigan.gov/deqwaste) (select "Hazardous & Liquid Industrial Waste Transportation"). A transporter needs to be permitted and registered under the hazardous waste and liquid industrial waste uniform transporter programs to transport either of these wastes.

You will want to select a designated facility that will be able to handle, treat, and dispose or recycle the waste you generate. A designated facility will accept only those types of wastes allowed by its permit or license. Additional special fees may be charged for small quantities of hazardous waste requiring extra handling by the facility. In addition, some facilities have their own requirements as to how they will accept waste material. For example, some companies will not accept hazardous waste in drums even though this is a common storage and transportation method. Your transporter is a good guide in selecting a qualified designated facility.

Because transporter and designated facility services, costs, and qualifications are highly varied, you should contact and interview several facilities to obtain price estimates before making a selection. You might also want to tour the designated facility yourself to see its operations. Remember, as the generator of the waste, you are ultimately responsible for how your waste is transported and disposed, so it is wise to choose a company on more than price.

## Storage Container Management

The proper storage and labeling of waste helps prevent mismanagement. It is a good idea to put one person in charge of making sure the wastes are correctly identified, labeled and stored. Labeling also helps to protect the workers. If the contents of containers are not known, the chances of a worker being exposed to hazards or being injured are increased. An explosion could occur if wastes that are incompatible are mixed with unknown wastes in a drum. Never place hazardous wastes that could react with each other in the same container. For example, you should never store acids (like battery acid) and bases (like alkaline rust remover) in the same container.

All of your containers storing hazardous and liquid industrial waste must comply with the container management requirements in this part of the audit.

✓ AUDIT QUESTIONS		
5.21. Is each storage container labeled with the name of the contents (e.g., "paint waste" or "spent solvent") and is the label readable?  <i>(See Figure 5.1 on page 24). The container may be labeled using purchased labels, a stencil, or a completed shipping label.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.22. Is each container that is being shipped labeled according to the U.S. Department of Transportation (USDOT) shipping requirements (e.g., does it have a completed USDOT shipping label as shown in Figure 5.2 on page 24)?  <i>Hazardous materials must be shipped in containers acceptable for transportation and properly labeled according to the USDOT requirements. Your transporter should be able to assist you with properly labeling the containers for transport. Contact the Michigan State Police, Traffic Safety Division at (517) 336-6580 for additional transportation requirements.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.23. Is less than 2,200 pounds (5 drums) of hazardous waste accumulated on site?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.24. Are containers in good condition and kept closed except when adding or removing waste?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.25. Is the exterior of the storage containers kept free of liquid waste and its residue?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.26. Are containers protected from the weather?  <i>If storing containers outdoors, they must be placed on an impervious surface and protected from the elements.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.27. Are containers protected from fire and secure from vandalism and physical damage such as that which is caused by fork lifts or other equipment?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.28. Are the containers compatible with the type of waste being stored in them and are containers that have wastes that could react with each other separated by a physical barrier, like a dike, berm, or wall, or by a safe distance?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.29. Is there adequate aisle space for unobstructed movement of emergency equipment and personnel?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.30. If contents have a flashpoint below 200°F, are they isolated according to local fire department recommendations?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC

✓ AUDIT QUESTIONS		
5.31. If a leak or spill occurs, do you immediately stop and contain the leak and repair or replace the container?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.32. Have employees been trained on how to properly manage waste?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.33. Does the hazardous waste storage area have secondary containment such as a curb, ramped pad, dike, or containment room?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
5.34. Are you doing any of the best management practices listed in Table 5.2?	<input type="checkbox"/> Yes	<input type="checkbox"/> No




TABLE 5.2: BEST MANAGEMENT PRACTICES - NOT REQUIRED, BUT RECOMMENDED
<input type="checkbox"/> Check all containers at least once a week to ensure that they are not leaking or rusting and bulges are not present. Also, check how much waste is stored in your containers so you do not exceed the 2,200 pounds (5 drum) limit.
<input type="checkbox"/> Clean up spills immediately.
<input type="checkbox"/> When opening, handling, or storing containers, be careful to avoid rupturing the containers or causing them to leak or spill.
<input type="checkbox"/> Maintain a spill control kit and equipment near the stored fluids.
<input type="checkbox"/> Use secondary containment. (See Part 7)
<input type="checkbox"/> Use tight fitting lids, leak-proof spigots, funnels, or pumps to transfer fluids.
<input type="checkbox"/> Prevent drips and spills:
<ul style="list-style-type: none"> <li> Use drip pans or trays to collect drips and spills where fluids are transferred, under leaking cars, and under parts that have been removed.</li> <li> Drain and collect the fluids on a covered, curbed, and sealed concrete area away from any drains.</li> <li> Use dedicated equipment, such as drain pans or funnels, for oil-based waste to prevent cross-contamination with chlorinated solvent wastes.</li> </ul>



Figure 5.1: Example of Hazardous Waste Storage Label



Figure 5.2: Hazardous Waste Shipping Label

## Liquid Industrial and Hazardous Waste Disposal Requirements

It is recommended that you use a hazardous waste disposal facility or recycle your waste. In a few Michigan areas, the [local household hazardous waste collection programs](#) accept hazardous waste from CESQGs for a fee.



**You must obtain permission from your local POTW before discharging liquid industrial waste to the sewer.** This is discussed in more detail in Part 1 of this workbook.

### ✓ AUDIT QUESTIONS

- 5.35. Is all of your liquid hazardous waste disposed of by one or more of the following methods?  Yes  No Complete RTC
- Shipped to a licensed recycling facility or designated facility? See the “Recycled Materials Market Directory” at [www.michigan.gov/deqrmmd](http://www.michigan.gov/deqrmmd) and the TSDF directory at [www.michigan.gov/deqwaste](http://www.michigan.gov/deqwaste).
  - Transported to a household hazardous waste collection site that is willing to accept your waste and send it on to a designated facility.
  - Discharged to a municipal sewer system with their permission.
- 5.36. Is all of your solid hazardous waste disposed of by one or more of the following methods?  Yes  No Complete RTC
- Shipped to licensed recycling facility or designated facility.
  - Placed in the dumpster under approval from the landfill authority.
  - Transported to a household hazardous waste collection site that is willing to accept your waste and send it on to a designated facility.
- 5.37. Is all of your liquid industrial waste disposed of in one or more of the following methods?  Yes  No Complete RTC
- Shipped to licensed recycling facility or designated facility.
  - Discharged under authorization from the POTW to a combined or sanitary sewer.
  - Transported to a household hazardous waste collection site that is willing to accept your waste and send it on to a designated facility.
- 5.38. Is your shop complying with all of the following requirements?  Yes  No Complete RTC
- Liquid hazardous wastes are never disposed of in a dumpster, solid waste landfill, or incinerator.
  - Waste is not dumped into a combined or sanitary sewer system without authorization from the POTW.
  - Liquid industrial and hazardous waste is not flushed into a septic tank, down a storm sewer, into a stream, or on the ground.
  - Solid hazardous waste is not disposed of in the dumpster without authorization from the landfill authority.
  - Any employee who prepares hazardous materials, including hazardous waste, for shipment or generally any person who is employed by a hazmat employer and who in the course of their employment directly affects hazardous materials transportation safety is considered a hazmat employee and is required to have training per the U.S. Department of Transportation (USDOT) Hazardous Materials Regulations. Go to the USDOT training modules at <http://hazmat.dot.gov/training/mods/mod.htm> for General Awareness Training as prescribed in the regulations.

✓ AUDIT QUESTIONS		
5.39. Do you dispose of waste by burning it?	<input type="checkbox"/> Yes Complete RTC	<input type="checkbox"/> No
5.40. Do you dispose of liquid waste by allowing it to evaporate into the air?	<input type="checkbox"/> Yes Complete RTC	<input type="checkbox"/> No
5.41. Are you following any of the best management practices listed in Table 5.3?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

TABLE 5.3: BEST MANAGEMENT PRACTICES - NOT REQUIRED, BUT RECOMMENDED
<input type="checkbox"/> Hazardous wastes that are solids are disposed of in one of the following ways: <input type="checkbox"/> Shipped to a licensed recycling facility or designated facility. <input type="checkbox"/> Taken to a household hazardous waste collection site willing to accept your hazardous waste.
<input type="checkbox"/> Solid hazardous wastes are not disposed of in a solid waste landfill or municipal waste incinerator.

### Used Oil and Used Oil Filters

As a potential cost saving activity, establish a used oil recycling program, or you will be required to pay for its disposal.

✓ AUDIT QUESTIONS		
5.42. Do you mix hazardous waste or other shop waste with your used oil?	<input type="checkbox"/> Yes Complete RTC	<input type="checkbox"/> No
5.43. Do you use a <a href="#">permitted and licensed transporter</a> to haul used oil or do you meet the self-transporting requirements as described on page 20 when hauling your own used oil?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.44. Do you keep manifests or the shipping records described on page 20 for self-transporting to demonstrate that your used oil has been properly handled?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.45. Do you burn used oil in a burner?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Go to 5.50
5.46. Are you burning only used oil generated on-site?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.47. Is your waste oil burner rated below 500,000 Btu/hr	<input type="checkbox"/> Yes Go to 5.49	<input type="checkbox"/> No
5.48. Do you have an approved air permit issued by the DEQ Air Quality Division for the oil burner?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.49. Are you complying with all of the local fire and building code requirements?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC

Please read the DEQ publication entitled "[Burning Used Oil](#)" for additional information and requirements. Go to [www.deq.state.mi.us/pubcenter](http://www.deq.state.mi.us/pubcenter), enter "burning used oil" in the keyword field and select "Search."



### ✓ AUDIT QUESTIONS

5.50. Are you complying with all of the storage container requirements identified on pages 23-24?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.51. Do you label all of your containers or storage tanks with "Used Oil?"	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.52. Are your used oil filters sent to a metal recycler?	<input type="checkbox"/> Yes Go to 5.54	<input type="checkbox"/> No
5.53. Does your shop comply with all of the following? <ul style="list-style-type: none"> <li>• Puncture the filter anti-drain back valve or the filter dome end.</li> <li>• Hot-drain the filter for a minimum of 12 hours to remove the oil. Include the collected oil from the filters with your other used oil.</li> <li>• Dispose of the filter in a licensed sanitary landfill that authorized the disposal.</li> </ul>	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
<p>Please read the DEQ publication entitled "<a href="#">Used Oil Filter Generator Requirements</a>" for additional information and requirements. Go to <a href="http://www.deq.state.mi.us/pubcenter">www.deq.state.mi.us/pubcenter</a>, enter "oil filter" in the keyword field and select "Search."</p>		
5.54. If a leak or spill of used oil occurs, will you be prepared to do all of the following? <ul style="list-style-type: none"> <li>• Stop the leak.</li> <li>• Contain the spilled material</li> <li>• Clean up the spilled material using cat litter, shop rags, or another absorbent (Oil Dry).</li> <li>• Repair or replace the storage container as necessary.</li> <li>• Report the release according to requirements as explained in <a href="#">Part 8</a> of this workbook.</li> </ul>	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.55. Is used oil disposed of in a septic tank, dumpster, storm drain, on the ground, in the water, at a landfill, or by open burning?	<input type="checkbox"/> Yes Complete RTC	<input type="checkbox"/> No
5.56. Do you apply used oil to control weeds or pests, or to roads for dust control?	<input type="checkbox"/> Yes Complete RTC	<input type="checkbox"/> No

### Used Antifreeze/Coolant

Most antifreeze/coolant is made of water and ethylene or propylene glycol. During use, antifreeze/coolant may pick up hazardous amounts of lead, cadmium, benzene, and solvents. For this reason used antifreeze/coolant may be a hazardous waste.

### ✓ AUDIT QUESTIONS

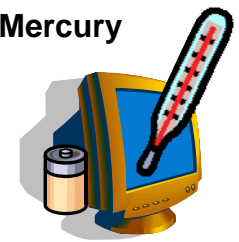
5.57. Do you mix hazardous waste or other shop waste with your used antifreeze/coolant?	<input type="checkbox"/> Yes Complete RTC	<input type="checkbox"/> No
5.58. Do you use a <a href="#">permitted and licensed transporter</a> to haul coolant or do you meet the self-transporting requirements as described on page 20 when hauling your own used coolant?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC

✓ AUDIT QUESTIONS		
5.59. Do you keep manifests or other shipping records as described on page 20 for self-transporting to demonstrate that your used coolant has been properly handled?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.60. Are you complying with all of the storage container requirements identified on pages 23-24?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.61. Do you label all of your containers or storage tanks with "Used Coolant?"	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.62. If a leak or spill of coolant occurs, will you be prepared to do all of the following? <ul style="list-style-type: none"> <li>• Stop the leak.</li> <li>• Contain the spilled material</li> <li>• Clean up the spilled material using cat litter, shop rags, or another absorbent (Oil Dry).</li> <li>• Repair or replace the storage container as necessary.</li> <li>• Report the release according to the requirements in <a href="#">Part 8</a> of this workbook.</li> </ul>	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.63. Is used coolant disposed of in a septic tank, dumpster, storm drain, on the ground, in the water, at a landfill, or by open burning?	<input type="checkbox"/> Yes Complete RTC	<input type="checkbox"/> No

If you recycle antifreeze/coolant on-site, there will be wastes such as sludges, filters, or resins. Unless you know through lab testing that they are NOT hazardous, you must store and dispose of them as a hazardous waste.

### Fluorescent Tubes, Lamps, Batteries and Other Devices Containing Mercury

Businesses have the choice of handling certain wastes as a "universal waste" instead of managing them as a hazardous waste. If you choose to manage these wastes as a universal waste, you DO NOT include this quantity in the calculation of hazardous waste generated per month (see pages 14-16).



You can arrange for a recycling company to pick up universal waste from your shop or you can ship it to a recycling facility. A hazardous waste manifest and the use of permitted and licensed transporters are NOT required. Recyclers can be found in the "Recycled Materials Market Directory" at [www.michigan.gov/deqrmmd](http://www.michigan.gov/deqrmmd).

Common types of universal wastes found at an auto body shop include the following:

- **Electric lamps**, including spent fluorescent tubes, high intensity discharge, sodium vapor, mercury vapor, neon, and incandescent lamps.
- **Batteries**, including lead acid and dry cell types.
- **Thermometers, thermostats, switches, and other devices that contain mercury.**
- **Computers and electronic office equipment.**



## ✓ AUDIT QUESTIONS

5.64. Do you recycle your lead acid batteries?	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete RTC
5.65. Does your shop recycle fluorescent tubes, incandescent lamps, dry cell batteries, devices containing mercury and/or electronic office equipment?  <i>Only put this waste in your trash (dumpster) with permission from waste hauler and/or landfill. Some transporters and landfills may no longer accept these wastes due to the lead and mercury contained in them. If you don't recycle these materials, be sure to include them in your monthly <a href="#">hazardous waste calculations</a> (see pages 15 and 16).</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No Go to 5.68
5.66. Are fluorescent tubes, incandescent lamps, dry cell batteries, lead acid batteries, devices containing mercury and/or electronic office equipment stored for recycling according to the following requirements? <ul style="list-style-type: none"> <li>• Stored not over one year after generation.</li> <li>• Records are kept that show how long they have been stored using a method that clearly demonstrates how long they have been accumulated.</li> <li>• Waste is labeled or the container holding the waste is labeled with the following: Lamps "universal waste electric lamps," "waste electric lamps," or "used electric lamps;" Batteries "universal waste battery(ies)," "waste battery(ies)," or "used battery(ies);" and Mercury Switches "universal waste mercury switches."</li> <li>• Waste is stored in a way that prevents spills or releases. Containers are kept closed, in good condition, and are compatible with the type of waste stored in the containers.</li> <li>• No more than 11,000 pounds of these wastes are accumulated at any one time.</li> </ul>	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete RTC
5.67. Have employees who handle fluorescent tubes, incandescent lamps, and dry cell batteries, lead acid batteries, devices containing mercury and electronic office equipment, been informed about proper handling of these waste materials and any emergency procedures?	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete RTC
5.68. Does your shop do any of the following? <ul style="list-style-type: none"> <li>• Recharge and use batteries that are still rechargeable.</li> <li>• Use low-mercury, energy efficient fluorescent/HID light bulbs.</li> <li>• Keep recycling or disposal receipts for at least three years, and know who takes them to be recycled or disposed.</li> <li>• Replace automotive switches that contain mercury (used in hood and trunk lighting and anti-lock braking systems) with switches that do not contain mercury (ball-bearing switches). <i>Mercury Switch removal and other information can be found at <a href="http://www.michigan.gov/deqmercuryp2">www.michigan.gov/deqmercuryp2</a>.</i></li> </ul>	<input type="checkbox"/> Yes <input type="checkbox"/> No

## Solid and Other Waste Requirements

Solid waste includes garbage, rubbish, industrial and commercial waste that is not regulated as a hazardous waste. Materials like paper, cardboard, metal, plastic can be recycled and reused. Recyclers can be found in the "Recycled Materials Market Directory" at [www.michigan.gov/deqrmmd](http://www.michigan.gov/deqrmmd). Removing these items from your trash can significantly lower solid waste disposal costs because your dumpster will not fill up as fast.



✓ AUDIT QUESTIONS		
5.69. Is all solid waste hauled to a recycling center or a licensed disposal facility, which includes: a landfill, incinerator, or a transfer/processing facility? <i>For a list of banned landfill wastes, go to <a href="http://www.state.mi.us/pubcenter">www.state.mi.us/pubcenter</a>, enter "Talking Trash" and select "Search."</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.70. Does waste stored in leak-proof, covered containers (e.g. covered dumpster)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.71. Does your facility recycle or reuse office paper, corrugated cardboard, wood pallets, 55-gallon clean drums, scrap metal, and scrap plastic?  <i>The removal of these and other bulky items from the trash can significantly lower solid waste disposal costs because your dumpster will not fill up as fast. You might also want to determine if you generate enough other materials to make collection of those items worthwhile.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
5.72. Do you burn your solid waste?	<input type="checkbox"/> Yes Complete RTC	<input type="checkbox"/> No



### Scrap Tires

When NOT properly managed, scrap tires can provide a breeding ground for rodents and mosquitoes. Stored tires are also a serious fire hazard. Tires can be retreaded or reprocessed into rubber products, rubberized asphalt, or adhesives.

✓ AUDIT QUESTIONS		
5.73. Do you keep your scrap tires in one location on your property, instead of scattered around the site?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.74. Are tires neatly stacked?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.75. Are scrap tires stored in grassy areas?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.76. Is a fire lane maintained around the pile?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.77. Do you store more than 500 tires on your property at any one time?  <i>You will be subject to the scrap tire collection site registration and to storage and bonding requirements if you do.</i>	<input type="checkbox"/> Yes Complete RTC	<input type="checkbox"/> No
5.78. Do you receive a copy of the Scrap Tire Transportation Record from the tire hauler at time of pickup?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.79. Do you receive a signed copy from end user, processor, or disposer within 30 days of them receiving the scrap tires and keep this signed copy at least three years after shipment?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
5.80. Do you burn, bury, or dump scrap tires?	<input type="checkbox"/> Yes Complete RTC	<input type="checkbox"/> No

### ✓ AUDIT QUESTIONS

- 5.81. Do you only contract with a registered scrap tire hauler to haul off scrap tires?  Yes  No  
*The hauler that picks up the tires must have their scrap tire registration number visibly displayed on the vehicle and a copy of their valid registration in their possession.* Complete RTC
- 5.82. Do you dispose of tires only at a facility registered or otherwise authorized by the DEQ to manage scrap tires?  Yes  No  
*A list of [registered haulers](http://www.michigan.gov/deqwaste) and collection sites is at [www.michigan.gov/deqwaste](http://www.michigan.gov/deqwaste) under "Scrap Tires." You may also contact your WHMD district office (see [Appendix A](#)) for a list of authorized facilities. Whole scrap tires cannot be disposed of in a landfill.* Complete RTC
- 5.83. Are you following any of the best management practices listed in Table 5.4?  Yes  No

### TABLE 5.4: BEST MANAGEMENT PRACTICES - NOT REQUIRED, BUT RECOMMENDED

- Train your employees in handling, storage, disposal, and/or recycling practices that follow the regulatory requirements and best management practices described in this section.
- Train your employees in emergency response operations in the case of a fire involving scrap tires.
- Store scrap tires indoors so they do not collect water and breed mosquitoes. If you must store them outside, store them under cover and protected from the weather.
- Keep the tires on rims, if possible, when storing tires outside to reduce water collection.
- If water does collect in some of the tires, use citrus oil or baking soda, or commercial larvicide to kill any mosquito larvae in the water.
- Transport stored scrap tires regularly to reduce the number of tires on-site.
- Arrange for your scrap tires to be sent to a facility where they will be retreaded or processed.
- Recycle lead wheel weights to avoid handling as hazardous waste. *Work with a tire dealer to use alternatives to lead wheel weights. Information is available at [www.leadfreewheels.org](http://www.leadfreewheels.org).*

## Part 6

### Motor Vehicle Air Conditioning (MVAC) Requirements

Chlorofluorocarbons (CFCs, Freon, R-12 and R-22) are a family of chemicals that are chemically stable, nonflammable, and noncorrosive. These chemicals are used in a variety of industrial and consumer applications including refrigeration, air conditioning, foam insulation, and solvents. One of the largest uses of CFCs in the United States is of the refrigerant R-12, used in automobile air conditioners. It is illegal to knowingly release chlorofluorocarbons (CFCs) to the environment. Important requirements for MVAC systems servicing are summarized below.



✓ AUDIT QUESTIONS		
6.1. Are all of your mechanics who handle refrigerants been trained and certified by a US Environmental Protection Agency (USEPA) accredited program?  <i>A list of approved <a href="#">certification organizations</a> can be obtained by calling the <a href="#">USEPA Stratospheric Ozone Hotline</a> at (800) 296-1996.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
6.2. Is a copy of the certification in your files or displayed in your shop?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
6.3. Are your mechanics who diagnose, service, repair, and adjust heating and air conditioning systems certified in <a href="#">Heating and Air Conditioning</a> by the Michigan Department of State, Bureau of Regulatory Services?  <i>For more information, contact the <a href="#">Bureau of Regulatory Services</a> at (888) SOS-MICH (767-6424) or go to <a href="http://www.michigan.gov/sos">www.michigan.gov/sos</a> and select "Services to Businesses."</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
6.4. Is a copy of the Heating and Air Conditioning certificate in your files or displayed in your shop?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
6.5. Do you vent refrigerants to the atmosphere?	<input type="checkbox"/> Yes Complete RTC	<input type="checkbox"/> No
6.6. Are refrigerants only purchased by USEPA-certified technicians?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
6.7. Is your refrigerant recovery equipment USEPA-approved and labeled?  <i>A list of USEPA-approved equipment can be obtained by calling the CFC Hotline at (800) 296-1996 or logging onto the <a href="http://www.epa.gov/ozone">CFC Web site</a> at <a href="http://www.epa.gov/ozone">www.epa.gov/ozone</a>.</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC
6.8. Are your refrigerants stored in tanks that meet the <a href="#">U.S. Department of Transportation</a> (USDOT) or <a href="#">Underwriters Laboratories</a> (UL) standards?	<input type="checkbox"/> Yes	<input type="checkbox"/> No Complete RTC

## ✓ AUDIT QUESTIONS

- |  |                              |   |
|--|------------------------------|---|
| 6.9. Are the tanks storing refrigerants labeled "Refrigerants."  | <input type="checkbox"/> Yes | <input type="checkbox"/> No<br>Complete RTC |
| 6.10. Do you keep a copy of all air conditioning repair transactions at the shop for five years?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No<br>Complete RTC |
| 6.11. Do you keep receipts of all refrigerant purchases for three years?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No<br>Complete RTC |
| 6.12. Do you ship recovered refrigerant to an off-site reclamation facility?<br><i>For a list of reclamation facilities, go to<br/><a href="http://www.epa.gov/ozone/title6/608/reclamation/reclist.html">www.epa.gov/ozone/title6/608/reclamation/reclist.html</a>.</i>         | <input type="checkbox"/> Yes | <input type="checkbox"/> No<br>Skip 6.13    |
| 6.13. Do you keep all of the following information on file for two years?<br><ul style="list-style-type: none"> <li>• Name and address of the refrigerant reclamation facility.</li> <li>• The volume of each shipment of recovered refrigerant sent to the facility.</li> </ul> | <input type="checkbox"/> Yes | <input type="checkbox"/> No<br>Complete RTC |

For more information on how to comply with these requirements, call the [USEPA Stratospheric Ozone Hotline](http://USEPA.org) at (800) 296-1996 or visit the [USEPA's Ozone Web site](http://USEPA.org) at [www.epa.gov/ozone](http://www.epa.gov/ozone).

## PART 7

### Secondary Containment

**Secondary containment** is a structural means to prevent hazardous materials from being released to groundwater, surface water, and human exposure. Not all of the materials used by auto body shops are subject to state and federal secondary containment regulations; however, secondary containment is highly recommended for all materials that may pose a risk to human health and the environment, if released. Also, some local ordinances and insurance companies may require containment or other storage requirements. Keep in mind, it is usually cheaper to install and utilize containment structures than to clean up releases that contaminate groundwater, surface water, and soils.

Many environmental regulations do not specify how the containment structures must be built, only that they are capable of keeping releases from reaching surface water, groundwater, and public sewer systems.
















*Figure 7-1: Secondary Containment*

Containment does not have to be expensive to be effective. Examples of secondary containment include:

- Metal drip pans under equipment
- Enclosed cabinets with sealed flooring
- Portable containment units or spill pallets  
(*Note: Spill pallets without sides do not meet the hazardous waste containment requirements for liquids because they do not provide squirt protection.*)
- Smaller containers placed in another, larger container (e.g., a 5-gallon jug put in a plastic storage box or a cut down 55-gallon drum)
- Plastic children's swimming pool
- Curbing, retaining walls, and floors designed with a slight slope to collect released liquids

Prefabricated or fabricated containment units may be purchased or containment structures can be built to your specifications by suppliers or facility employees.

Releases, and subsequent removal of material from containment areas, can usually be prevented by using common sense and care when storing and transferring materials. Tips include:

-  Train all personnel handling the materials about spill prevention and response techniques. Some regulations indicate who, at a minimum, must be trained.
-  Practice safe loading and unloading procedures.
-  Keep container lids and covers closed to control spills and evaporation. Many regulations require this.
-  Post appropriate warning and instructional signs in usage and storage areas.
-  Adequately label all containers.
-  Use pumps or funnels to transfer liquids.
-  Use seal-less pumps.
-  Install splash guards and drip boards on tanks and faucets.
-  Use drip buckets under liquid spigots.
-  Have absorbent materials (e.g., kitty litter, Oil Dry, pigs, pads) and devices or covers that block drains readily available where they may be used if there is a release.
-  Prohibit transferring or draining of fluids outside over the ground or on pavement not designed for containment.
-  Conduct regular inspections to identify leaks or other problems.
-  Have inventory control procedures to track materials from receipt to material use or disposal, and use tracking to determine if releases have occurred.

**Any collected liquids and materials from secondary containment structures might be considered a hazardous or liquid industrial waste. If it is only clean storm water, you may be able to discharge to the surface water. Contact the Water Bureau district office if you have questions. (Appendix A).**



## PART 8

### Spills

Do not wash, sweep, or in any way direct a spill outside to the ground or down a drain. Contain and collect the spilled material and dispose of it properly.

Absorbents used to clean up spills can be sent to a licensed landfill if:

1. The landfill will accept absorbents (e.g. Oil Dry).
2. The absorbents do not contain “free” or unbound liquids.
3. No other wastes were intentionally added to the absorbents.



Containing a small spill of oil or solvent on an impervious surface that can be easily cleaned up with absorbents doesn't require that the incident be reported. However, if you have a release of a chemical that enters a drain connected to a combined, sanitary, or storm sewer; makes contact with the soil; or enters surface water such as a drain, river, or lake, then you need to report that release by calling the following numbers within fifteen minutes after the release:

1. **911**
2. **(800) 292-4706** DEQ [Pollution Emergency Alert System](#) (PEAS)
3. **(800) 424-8802** [National Response Center](#) (NRC)

It is advisable that you maintain a listing of important numbers near your phones including PEAS and the NRC. [Appendix G](#) is an “Important Emergency Numbers” poster that you can complete and post at various locations within your shop.

It is recommended that you document the release using the DEQ “[Spill or Release Report](#)” (see [Appendix F](#)). Include what you did to respond to the release. An electronic copy of the form can be obtained at [www.michigan.gov/deqrelease](http://www.michigan.gov/deqrelease). Click on “[Release Reporting Forms](#)” and “[EQP 3465](#).”



## ✓ AUDIT QUESTION

8.1. Are you doing all of the following?

 Yes No

Complete RTC

- Plan ahead: Identify an area between the shop's storm sewers and the water body (drainage ditch, river, lake or stream) it enters, where a spill could be contained before entering that water body.
- Maintain spill response materials (i.e., absorbent pads, socks and/or pillows, goggles, gloves, disposable bags, Oil Dry) necessary to contain a spill on a moment's notice. (A spill stopped before migrating to surface water can save a lot of money in clean-up costs).
- You should train your employees on what to do during an emergency, including:
  - How to respond to serious spills or other accidents.
  - How to respond to communication and alarm systems.
  - How to contact emergency responders (fire, police, and ambulance).
  - Where to find emergency equipment.
  - How to use evacuation plans and routes.
  - How to extinguish a fire and when to attempt this.
  - How to contain and clean up a spill.
  - Who to inform if an emergency occurs.
  - How to follow your shop's emergency plan.



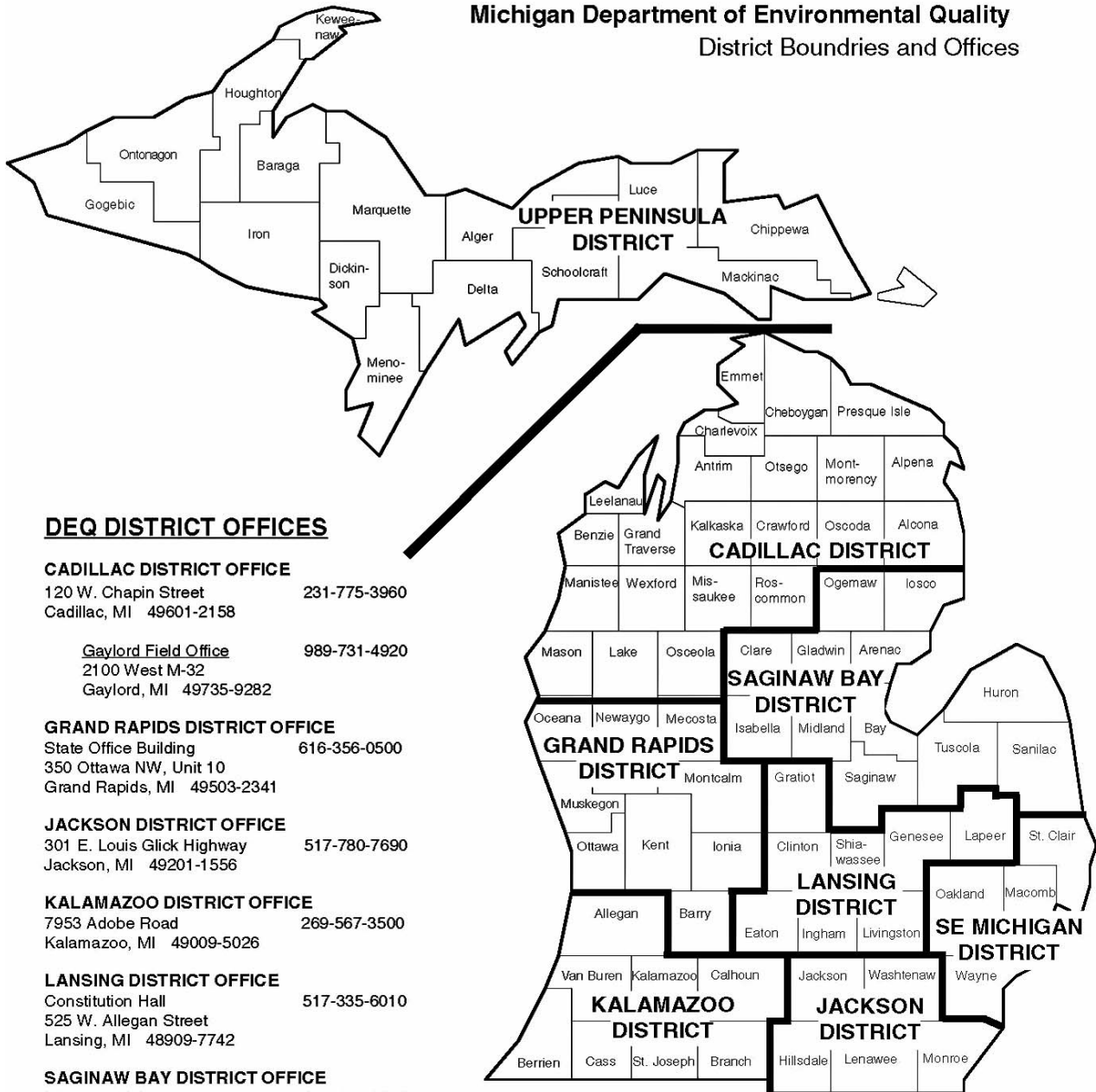
*The Michigan Occupational Safety and Health Act (MIOSHA) Hazard Communication/ Employee Right-to-Know Standard requires you to develop a program for employees exposed to hazardous chemicals. For more information about this and other MIOSHA standards your shop must comply with (see [Appendix C](#) and visit the MIOSHA Standards Section Web site at [www.michigan.gov/mioshastandards](http://www.michigan.gov/mioshastandards)).*

- If you store more than 440 pounds of chemicals outdoors or more than 2,200 pounds of chemicals indoors, you may be subject to the Pollution Incident Prevention Plan (PIPP) requirements. Contact the DEQ Environmental Assistance Program at (800) 662-9278 for more information.



# APPENDIX A – Contact Information

## Michigan Department of Environmental Quality District Boundries and Offices



### DEQ DISTRICT OFFICES

#### CADILLAC DISTRICT OFFICE

120 W. Chapin Street 231-775-3960  
Cadillac, MI 49601-2158

Gaylord Field Office 989-731-4920  
2100 West M-32  
Gaylord, MI 49735-9282

#### GRAND RAPIDS DISTRICT OFFICE

State Office Building 616-356-0500  
350 Ottawa NW, Unit 10  
Grand Rapids, MI 49503-2341

#### JACKSON DISTRICT OFFICE

301 E. Louis Glick Highway 517-780-7690  
Jackson, MI 49201-1556

#### KALAMAZOO DISTRICT OFFICE

7953 Adobe Road 269-567-3500  
Kalamazoo, MI 49009-5026

#### LANSING DISTRICT OFFICE

Constitution Hall 517-335-6010  
525 W. Allegan Street  
Lansing, MI 48909-7742

#### SAGINAW BAY DISTRICT OFFICE

503 N. Euclid Avenue, Suite 1 989-686-8025  
Bay City, MI 48706-2925

#### SOUTHEAST MICHIGAN DISTRICT OFFICE

27700 Donald Court 586-753-3700  
Warren, MI 48092-2793

Detroit Field Office 313-456-4700  
Cadillac Place  
3058 West Grand Boulevard, Suite 2-300  
Detroit, MI 48202-6058

#### UPPER PENINSULA DISTRICT OFFICE

420 5th Street 906-346-8300  
Gwinn, MI 49841

#### ENVIRONMENTAL ASSISTANCE CENTER

(for general information):

Telephone: 800-662-9278

Fax: 517-241-0673

#### POLLUTION EMERGENCIES

Telephone: 800-292-4706

#### DEQ WEB PAGE

[www.michigan.gov/deq](http://www.michigan.gov/deq)

**DEPARTMENT OF LABOR AND ECONOMIC GROWTH (DLEG)**  
**MICHIGAN OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (MIOSHA)**

MIOSHA Hotline	(800)TO-MIOSH (800) 866-4674
Fatality or Catastrophe Hotline	(800) 858-0397
General Information	(517) 322-1814
Appeals Division	(517) 322-1297
Construction Safety & Health Division	(517) 322-1856
Consultation Education and Training Division(CET)	(517) 322-1809
CET Grant Program	(517) 322-1865
Employee Discrimination Division	(248) 888-8777
Freedom of Information Section	(517) 322-1295
General Industry Safety & Health Division	(517) 322-1831
Management and Technical Services Division	(517) 322-1848
Recordkeeping	(517) 322-1848
Standards Section	(517) 322-1845

# APPENDIX B - Additional Resources

## Automotive Service Association of Michigan

The Automotive Service Association (ASA) of Michigan is an association of automotive service businesses dedicated to improving the state's automotive service industry and the success of its members.

The mission of the ASA is to advance excellence, professionalism, and integrity by providing education and member benefit programs, serving as a resource and advocate on issues affecting the members, and promoting a Code of Ethics. For more information call 734-462-9250 or visit [www.asamichigan.com](http://www.asamichigan.com).



## The Coordinating Committee For Automotive Repair (CCAR) – Greenlink® Service



Coordinating Committee  
For Automotive Repair (CCAR®)  
*A Partnership of Industry, Education & Government*



CCAR-GreenLink®, the National Environmental Compliance Assistance Center for the automotive industry, is available 24 hours a day through its web site. Environmental information and best

management practices are presented to help automotive shop owners, managers, and technicians better understand their environmental responsibilities and achieve compliance with environmental program requirements. When properly utilized, this information can help businesses reduce costs and manage hazardous wastes and related items.

Call (888) GRN-LINK (476-5465) toll-free and you can speak directly to a CCAR® representative who will answer questions or access the CCAR-GreenLink®'s Web site at [www.ccar-greenlink.org](http://www.ccar-greenlink.org). Questions and comments can be sent to CCAR® by Email at [ccarinfo@ccar-greenlink.org](mailto:ccarinfo@ccar-greenlink.org).

## Cost Calculators for Body Shops

The Iowa Waste Reduction Center's Small Business Pollution Prevention Center has developed three cost calculators to help the small auto body repair shop determine if it is beneficial for a facility to invest in waste reduction and pollution prevention equipment. The equipment evaluated includes HVLP spray guns, LaserTouch® Device & STAR® training program, small batch solvent (thinner) distillation units, and automatic gun wash units.

Sources of information used to develop the calculators can be found with each individual calculator. Information needed to use the calculators is limited to the amount of paint used per year, the average cost of paint used, and/or the amount of solvent/thinner used per year. For more information, visit [www.iwrc.org/programs/calcs.cfm](http://www.iwrc.org/programs/calcs.cfm).



## Pollution Prevention

The first step on the road to environmental compliance is to look for opportunities to use fewer hazardous materials and to generate less waste. In other words, avoid pollution at its source. Why manage wastes when you can eliminate them?

Pollution prevention (P2) techniques can help you reduce your compliance burdens, make your work place cleaner and safer, increase your competitiveness, and save you money. Correctly practiced, P2 is not a one-time effort, but a core part of day-to-day operations and long-term planning.

## What can P2 do for me?

P2 can save you money and can make it easier for you to meet most of the environmental requirements in this Workbook. P2 improvements can reduce or eliminate your hazardous waste, increase your productivity, and improve the safety of your shop.

The Environmental Science and Services Division offers a couple of programs to help jump start your pollution prevention efforts:

The Retired Engineer Technical Assistance Program (RETAP): Retired professionals provide on-site P2 assistance to businesses with less than 500 employees. Assessments are confidential, free of charge, and non-regulatory.



500

Small Business Pollution Prevention Loan Program: Low-interest loans of up to \$300,000 are available to small businesses of 500 employees or less to finance projects that eliminate or minimize the generation of waste through P2 or result in the identification of significant energy savings within their operations.



loans  
or less  
through  
their

If you are interested in the RETAP or loan program, contact the Environmental Assistance Program at (800) 662-9278 or visit the DEQ's Web site at [www.michigan.gov/deq](http://www.michigan.gov/deq).

# APPENDIX C - Health And Safety Standards

Your employees are your most valuable resources. The Michigan Occupational Safety and Health Act (MIOSHA) governs regulations related to the health and safety of you, your employees, and your work areas. MIOSHA is administered by the Michigan Department of Labor and Economic Growth, Bureau of Safety and Regulation. The MIOSHA General Industry Health and Safety Standards are divided into parts. Within each part are rules that address various subjects. The following is a brief description, including the part number, of the MIOSHA rules that most auto body shops need to comply with.

**Injury and Illness Record Keeping (Administrative Rules, Part 11)** – Track occupational injuries and illnesses in the work place.

**Automotive Service Operations (Safety, Part 72)** – Practice safe maintenance and operation of equipment at facilities where vehicles are serviced, repaired, and salvaged. The Automotive Service Operation rules cover many aspects of vehicle repair: employee responsibility; personal protective equipment; lighting; machinery and equipment installation; housekeeping; ventilation and air receivers; flammables, painting, and coating; belt servicing; air conditioning; cranes and winches, hoists, and chain falls; wreckers; jacking and blocking; radiator and gas tanks; transmissions; rim wheel servicing; and automotive lifts.

**Hazard Communication Program/Employee Right-To-Know (Safety, Part 92)** – Educate and train employees on the dangers of the hazardous chemicals present in the shop and provide directions on how to handle them safely.

**MIOSHA Posting (Administrative Rules, Part 13)** – Display a copy of the poster “*Michigan Safety and Health Protection on the Job*” in a conspicuous location.

**Personal Protective Equipment (PPE) (Safety, Part 33)** – Provide PPE and training on how to use it to employees who have the potential of being exposed to a hazard that cannot be eliminated through safeguarding or engineering changes. Some PPE includes face, eye, foot, and hand protection and respirators.

**HAZWOPER (Health, Part 432)** – Recognize an emergency response situation and understand the appropriate action to take when one occurs.

**First Aid (Health, Part 472)** – Train an employee to render first aid if medical services (clinic, ambulance, hospital, etc.) are not readily accessible.

**Sanitation (Health, Part 474)** – Provide potable (approved for drinking) water supplies, vermin control, waste disposal, lavatories, and a safe environment for the consumption of food and beverages.

**General Housekeeping Guidelines (Safety, Part 1)** – Maintain good housekeeping which benefits everyone in your shop by creating safe and clean surroundings. Keep floors clean and clear to reduce the chance that employees will trip or fall.

**Machine Guarding Requirements (Safety, Part 1 and Part 7)** – Safeguard equipment that transmits power so that employees do not become entangled, pinched, or caught in moving parts. Belts and pulleys, flywheels, chains, sprockets, and gears must all be guarded.

**Fire Safety (Safety, Part 6, Part 8 and Part 9)** – Recognize and prevent fire hazards, maintain fire exists, and install fire extinguishers.

**Electrical Safety (Safety, Part 39 and Part 40)** – Train employees who are exposed to potential electrical hazards.

**Lockout/Tagout (Safety, Part 85)** – Develop a lockout/tagout program to protect employees during machine and equipment servicing or maintenance where unexpected machine energization, start-up, or release of stored energy could cause injury to employees.

**Flammable and Combustible Liquids (Safety, Part 75)** – Design and construct inside storage rooms and follow safe handling requirements for flammable and combustible liquids.

**Welding and Cutting (Safety, Part 12)** – Provide a safe environment for persons involved in welding, cutting, soldering, brazing, and acetylene generating in, about, or around places of employment.



**Hand and Portable Powered Tools (Safety, Part 38)** – Maintain and operate hand tools and portable powered tools in a safe manner.

**Air Receivers (Safety, Part 93)** – Follow safe operating practices for compressed air receivers and other equipment used in providing and utilizing compressed air for performing operations such as painting and cleaning.

**Polishing, Buffing, and Abrading (Safety, Part 11)** – Operate buffing and polishing wheels and coated abrasives in a safe manner.

**Spray-finishing Operations (Safety, Part 76 and Health, Part 528)** – Design and operate spray booths and rooms to prevent fire hazards.

If you would like to receive a copy of the standards, contact the Safety Standard Division of the Department of Labor and Economic Growth at (517) 322-1845 or go to [www.michigan.gov/dleg](http://www.michigan.gov/dleg) and download them. If you have safety and health training questions, contact the Consultation Education and Training Division. Occupational safety consultants and industrial hygienists can help you understand and comply with the standards free of charge. Call (517) 322-1809 or go to [www.michigan.gov/dleg](http://www.michigan.gov/dleg).



# APPENDIX D – Construction and Fire Codes

## ***Construction Codes***

All auto body shops must be designed according to code in terms of the actual structure and plumbing, electrical, and mechanical systems. The purpose of the code is to ensure the safety and welfare of the building inhabitants. Construction or alteration to a building is largely regulated by local units of government. For new construction or alterations of an existing building, the business owner must submit plans and specifications signed and sealed by a Michigan licensed architect or engineer to the respective municipality. During plan review, the building official or inspector and fire marshal will review and sign off on the plans if compliance with the building, plumbing, electrical, and plumbing codes is demonstrated. Once the construction is completed, a final inspection is conducted by the building inspector. For construction of a new building, a certificate of occupancy is issued and the business is allowed to operate.

All Michigan municipalities are required to administer and enforce the same building, plumbing, electrical, and mechanical codes adopted by the state. Michigan has adopted the International Codes and NFPA Electrical Code with some changes. If a municipality does not have a building department, the plan review will be conducted by the Michigan Department of Labor and Economic Growth (DLEG), Bureau of Construction Codes.

If your local unit of government does not have a building department or you are not sure who to call, contact the DLEG, Bureau of Construction Codes at (517) 241-9302 or go to [www.michigan.gov/bcc](http://www.michigan.gov/bcc).

## ***Fire Codes***

In addition to the construction codes, many local units of government adopt a national fire prevention code. Fire prevention codes pertain to the subsequent operation and maintenance of the building that ensure the prevention of fire and the protection of life from exposure to the dangers of fire and explosion. The codes address such fire safety issues as fire protection systems (i.e., fire alarms, fire suppression systems), fire exits, use and maintenance of specific equipment and processes, and storage and handling of flammable and combustible materials.

Fire marshals from municipalities conduct routine inspections to ensure compliance with the locally adopted fire prevention code. Unlike the construction codes, there is no statewide fire code. If there is not a fire code adopted by the local jurisdiction, the State Rules for Fire Prevention, which reference the National Fire Protection Association (NFPA) Standard No.1, is applicable. These rules are enforced by the Michigan Department of Labor and Economic Growth, Bureau of Fire Services. Contact that office at (517) 241-8847 or [www.michigan.gov/dleg](http://www.michigan.gov/dleg).

If you have fire safety related questions or if your local fire department has not visited your facility within the last year or two, contact your local fire chief or marshal. To view a directory of local fire departments, go to [www.michigan.gov/dleg](http://www.michigan.gov/dleg) and click on “Agencies & Commissions,” “Bureau of Fire Services,” and “State Fire Marshal,” then select “[Michigan Fire Service Directory](#).”



## APPENDIX E - Laboratory Testing

Sometimes it will be necessary to test samples of your waste to determine if it is hazardous waste or liquid industrial waste. When you need to do this, hire a reputable firm to provide these services and obtain a written contract. The contract should clearly identify what specific services that company will provide. For example, instead of just containing vague language about sampling the waste, it should identify:

- Who will be responsible for collecting the sample?
- Who will arrange to have it analyzed?
- Who will arrange to have an expert look at the analysis results?
- Who will determine if the waste is hazardous and at what regulatory limit.

It is a good idea to check with the treatment, storage, and disposal facility (TSDF) where you intend to send your waste before hiring a testing laboratory. They might require specific laboratory tests and only accept data from specific laboratories. If that is the case, then ask them for a listing of these tests and the purpose of the tests, along with the approved testing methods and the acceptable laboratories. This step will prevent you from spending money on laboratory tests which are not necessary or that do not meet the treatment, storage and disposal facility's requirements. A directory of environmental and drinking water testing laboratories is available on the Web at [www.michigan.gov/deqlaboratoryservices](http://www.michigan.gov/deqlaboratoryservices). Click on "Drinking Water," and the [searchable directory](#) is found under "Information."

Samples used for these tests must be representative of the waste you generate. If you change a process or products that result in a change of your wastes, you need to repeat the tests. The laboratory must use USEPA-approved testing methods. Laboratories will provide documentation about the components and characteristics of the waste. In some cases, the tests will save you money by showing that you do not have hazardous waste. Keep your analytical results on file at least three years.

The paint filter test is a method used to determine the presence of free liquids in a representative sample of waste. A predetermined amount of material is placed in a paint filter. If any portion of the material passes through and drops from the filter within the 5-minute test period, it contains free liquids. If these wastes are not regulated under the hazardous waste regulations, they are regulated as a liquid industrial waste.

A TCLP is used to determine if a waste has toxicity characteristics in amounts that meet or exceed regulatory limits causing it to be regulated as hazardous waste. The TCLP was designed to predict whether a waste is likely to leach chemicals into groundwater. It simulates the conditions a waste might encounter in a typical municipal solid waste landfill. Be aware that it is not necessary to identify every chemical component of the waste in order to meet the hazardous waste regulations and ensure adequate treatment or disposal. It may not be necessary to run a TCLP for every constituent included on the "D" list if you are familiar with your process. For example, you may only need to have a TCLP done for metals and volatiles if you know that the other constituents are not present in the waste. In other situations, you may only need to know if a liquid waste is ignitable and can request a flashpoint test, or if it is corrosive and have a pH test done.

Special tests might be required if you have drums or containers of mixed or unidentified old waste. You may be able to minimize laboratory testing costs by providing information about your waste streams and operations that were previously collected during your waste survey.

Although it is not commonly done, you may be able to conduct some tests on your own to determine if you have hazardous waste. For example, used oil can be tested on-site by using a commercial test kit to determine if it contains total halogens greater than 1,000 ppm requiring it to be handled as a hazardous waste. Discuss these testing options with your permitted and registered waste transporter, TSD, or recycling company to see if they will accept these test results.

For additional information, refer to the DEQ's fact sheet entitled "[Waste Characterization](#)." Go to [www.deq.state.mi.us/pubcenter](http://www.deq.state.mi.us/pubcenter), enter "waste characterization" in the keyword field, and select "Search."

# APPENDIX F



## MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

### SPILL OR RELEASE REPORT

**NOTE:** Some regulations require a specific form to use and procedures to follow when reporting a release. Those forms and procedures **MUST** be used and followed if reporting under those regulations. This report form is to aid persons reporting releases under regulations that do not require a specific form. This report form is not required to be used. **To report a release, some regulations require a facility to call the PEAS Hotline at 800-292-4706, or DEQ District Office that oversees the county where it occurred, and other regulating agencies and provide the following information. A follow-up written report may be required. Keep a copy of this report as documentation that the release was reported. If you prefer to submit this report electronically by FAX or e-mail, contact the regulating agency for the correct telephone number or e-mail address. See the DEQ website on [Spill/Release Reporting](#) for more reporting information.**

*Please print or type all information.*

NAME AND TITLE OF PERSON SUBMITTING WRITTEN REPORT			TELEPHONE NUMBER (provide area code)		
NAME OF BUSINESS			RELEASE LOCATION (provide address if different than business, if known, and give directions to the spill location. Include nearest highway, town, road intersection, etc.)		
STREET ADDRESS					
CITY	STATE	ZIP CODE			
BUSINESS TELEPHONE NUMBER (provide area code)					
SITE IDENTIFICATION NUMBER AND OTHER IDENTIFYING NUMBERS (if applicable)			COUNTY	TOWNSHIP	TIER/RANGE/SECTION (if known)

**RELEASE DATA.** Complete all applicable categories. Check all the boxes that apply to the release. Provide the best available information regarding the release and its impacts. Attach additional pages if necessary.

DATE & TIME OF RELEASE (if known) ____/____/____ _____am/pm	DATE & TIME OF DISCOVERY ____/____/____ _____am/pm	DURATION OF RELEASE (if known) _____ days _____ hours _____ minutes	TYPE OF INCIDENT <input type="checkbox"/> Explosion <input type="checkbox"/> Fire <input type="checkbox"/> Leaking container <input type="checkbox"/> Loading/unloading release <input type="checkbox"/> Pipe/valve leak or rupture <input type="checkbox"/> Vehicle accident <input type="checkbox"/> Other: _____
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MATERIAL RELEASED (Chemical or trade name) <input type="checkbox"/> CHECK HERE IF ADDITIONAL MATERIALS LISTED ON ATTACHED PAGE.	CAS NUMBER or HAZARDOUS WASTE CODE	ESTIMATED QUANTITY RELEASED (indicate unit e.g. lbs, gals, cu ft or yds)	PHYSICAL STATE RELEASED (indicate if solid, liquid, or gas)
_____	_____	_____	_____

FACTORS CONTRIBUTING TO RELEASE <input type="checkbox"/> Equipment failure <input type="checkbox"/> Operator error <input type="checkbox"/> Faulty process design <input type="checkbox"/> Training deficiencies <input type="checkbox"/> Unusual weather conditions <input type="checkbox"/> Other: _____	SOURCE OF LOSS <input type="checkbox"/> Container <input type="checkbox"/> Railroad car <input type="checkbox"/> Pipeline <input type="checkbox"/> Ship <input type="checkbox"/> Tank <input type="checkbox"/> Tanker <input type="checkbox"/> Truck <input type="checkbox"/> Other: _____
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TYPE OF MATERIAL RELEASED <input type="checkbox"/> Agricultural: manure, pesticide, fertilizer <input type="checkbox"/> Chemicals <input type="checkbox"/> Flammable or combustible liquid <input type="checkbox"/> Hazardous waste <input type="checkbox"/> Liquid industrial waste <input type="checkbox"/> Oil/petroleum products or waste <input type="checkbox"/> Salt <input type="checkbox"/> Sewage <input type="checkbox"/> Other: _____ <input type="checkbox"/> Unknown	MATERIAL LISTED ON or DEFINED BY <input type="checkbox"/> CAA Section 112(r) list (40 CFR Part 68) <input type="checkbox"/> CERCLA Table 302.4 (40 CFR Part 302) <input type="checkbox"/> EPCRA Extremely Hazardous Substance (40 CFR Part 355) <input type="checkbox"/> Michigan Critical Materials Register or permit <input type="checkbox"/> NREPA Part 31, Part 5 Rules polluting material <input type="checkbox"/> NREPA Part 111 or RCRA hazardous waste <input type="checkbox"/> NREPA Part 121 liquid industrial waste <input type="checkbox"/> Other list: _____ <input type="checkbox"/> Unknown	IMMEDIATE ACTIONS TAKEN <input type="checkbox"/> Containment <input type="checkbox"/> Dilution <input type="checkbox"/> Evacuation <input type="checkbox"/> Hazard removal <input type="checkbox"/> Neutralization <input type="checkbox"/> System shut down <input type="checkbox"/> Diversion of release to treatment <input type="checkbox"/> Decontamination of persons or equipment <input type="checkbox"/> Monitoring <input type="checkbox"/> Other: _____
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RELEASE REACHED	Distance from spill location to surface water, in feet: _____
<input type="checkbox"/> Surface waters (include name of river, lake, drain involved): _____	
<input type="checkbox"/> Drain connected to sanitary sewer (include name of wastewater treatment plant and/or street drain, if known): _____	
<input type="checkbox"/> Drain connected to storm sewer (include name of drain or water body it discharges into, if known): _____	
<input type="checkbox"/> Groundwater (indicate if it is a known or suspected drinking water source and include name of aquifer, if known): _____	
<input type="checkbox"/> Soils (include type e.g. clay, sand, loam, etc.): _____	
<input type="checkbox"/> Ambient Air	
<input type="checkbox"/> Spill contained on impervious surface	

EXTENT OF INJURIES, IF ANY  <hr/> <hr/>	WAS ANYONE HOSPITALIZED? <input type="checkbox"/> Yes NUMBER _____ HOSPITALIZED: _____  <input type="checkbox"/> No	TOTAL NUMBER OF INJURIES TREATED ON-SITE: _____																																																						
DESCRIBE THE INCIDENT, THE TYPE OF EQUIPMENT INVOLVED IN THE RELEASE, HOW THE VOLUME OF LOSS WAS DETERMINED, ALONG WITH ANY RESULTING ENVIRONMENTAL DAMAGE CAUSED BY THE RELEASE. IDENTIFY WHO IMMEDIATELY RESPONDED TO THE INCIDENT (own employees or contractor — include cleanup company name, contact person, and telephone number). ALSO IDENTIFY WHO DID FURTHER CLEANUP ACTIVITIES, IF PERFORMED OR KNOWN WHEN REPORT SUBMITTED <input type="checkbox"/> CHECK HERE IF DESCRIPTION OR ADDITIONAL COMMENTS ARE INCLUDED ON ATTACHED PAGE  <hr/> <hr/> <hr/> <hr/> <hr/>																																																								
ESTIMATED QUANTITY OF ANY RECOVERED MATERIALS AND A DESCRIPTION OF HOW THOSE MATERIALS WERE MANAGED (include disposal method if applicable) <input type="checkbox"/> CHECK HERE IF DESCRIPTION OR ADDITIONAL COMMENTS ARE INCLUDED ON ATTACHED PAGE  <hr/> <hr/>																																																								
ASSESSMENT OF ACTUAL OR POTENTIAL HAZARDS TO HUMAN HEALTH (include known acute or immediate and chronic or delayed effects, and where appropriate, advice regarding medical attention necessary for exposed individuals.) <input type="checkbox"/> CHECK HERE IF DESCRIPTION OR ADDITIONAL COMMENTS ARE INCLUDED ON ATTACHED PAGE  <hr/> <hr/>																																																								
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY NOTIFIED:  <b>INITIAL CONTACT BY:</b> <input type="checkbox"/> Telephone <input type="checkbox"/> Fax <input type="checkbox"/> Email <input type="checkbox"/> Other  <b>DATE/TIME INITIAL CONTACT:</b> _____  <input type="checkbox"/> PEAS: 800-292-4706 Log Number Assigned: _____ <input type="checkbox"/> DEQ District or Field Office Divisions or Offices Contacted: <input type="checkbox"/> Baraga <input type="checkbox"/> Gwinn <input type="checkbox"/> Air Quality <input type="checkbox"/> Bay City <input type="checkbox"/> Jackson <input type="checkbox"/> Land & Water Management <input type="checkbox"/> Cadillac <input type="checkbox"/> Kalamazoo <input type="checkbox"/> Office Geological Survey <input type="checkbox"/> Crystal Falls <input type="checkbox"/> Lansing <input type="checkbox"/> Remediation and <input type="checkbox"/> Detroit <input type="checkbox"/> Newberry Redevelopment <input type="checkbox"/> Gaylord <input type="checkbox"/> Warren <input type="checkbox"/> Waste and Hazardous <input type="checkbox"/> Grand Rapids <input type="checkbox"/> Wyoming Materials DEQ Office locations are subject to change <input type="checkbox"/> Water Bureau	OTHER ENTITIES NOTIFIED:  <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:80%;"></th> <th style="width:10%; text-align: center;">Date:</th> <th style="width:10%; text-align: center;">Time:</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> National Response Center (NRC): 800-424-8802</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td><input type="checkbox"/> US Coast Guard Office:</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td style="padding-left: 20px;"><input type="checkbox"/> Detroit <input type="checkbox"/> Grand Haven <input type="checkbox"/> Sault Ste. 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THIS IS A MASTER COPY. PLEASE MAKE COPIES AS NEEDED.

# **APPENDIX G**

## **Important Emergency Numbers**





# Important Emergency Numbers

Complete this page, make copies, and post next to each telephone.

## LOCAL EMERGENCY ASSISTANCE TELEPHONE NUMBERS

### FIRE DEPARTMENT

EMERGENCY: 911 GENERAL: \_\_\_\_\_

### LOCAL POLICE

EMERGENCY: 911 GENERAL: \_\_\_\_\_

### COUNTY SHERIFF

EMERGENCY: 911 GENERAL: \_\_\_\_\_

### STATE POLICE

EMERGENCY: 911 GENERAL: \_\_\_\_\_

### AMBULANCE

EMERGENCY: 911 GENERAL: \_\_\_\_\_

### ELECTRIC COMPANY

EMERGENCY: \_\_\_\_\_ GENERAL: \_\_\_\_\_

### GAS COMPANY

EMERGENCY: \_\_\_\_\_ GENERAL: \_\_\_\_\_

### LOCAL HOSPITAL

### FACILITY EMERGENCY CONTACT

### LOCAL EMERGENCY MANAGEMENT COORDINATOR

### COUNTY ROAD COMMISSIONER

### COUNTY DRAIN COMMISSIONER

### SPILL/CLEANUP CONTRACTOR

## FACILITY INFORMATION:

Name of Facility: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Address of Facility: \_\_\_\_\_

\_\_\_\_\_

County: \_\_\_\_\_

Township: \_\_\_\_\_

Section: \_\_\_\_\_

**Directions to facility:** Help can come from any direction. Be sure to write down exact, simple, and accurate directions.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_

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### State and federal agency telephone numbers:

Pollution Emergency Alerting System (PEAS), DEQ ..... **1-800-292-4706**

National Response Center ..... **1-800-424-8802**

Michigan Poison Control System ..... **1-800-222-1222**



# APPENDIX H

## Michigan Auto Body Return-to-Compliance Plan

If you are not in compliance with a requirement identified in the audit, you will be directed to complete a Return-to-Compliance (RTC) Plan. You will need to complete an RTC Plan for each requirement you do not meet. Four RTC Plans can be entered on this page. If additional plans need to be completed, make or print copies of this form.

### Return-to-Compliance Plan 1

1. Question from the Compliance Workbook for which you are reporting non-compliance: \_\_\_\_\_  
Question Number
2. Describe the Requirement (provide brief description below):
3. What corrective action will you or have you taken to return to compliance (provide brief description below):
4. Date you will return to compliance: \_\_\_\_\_  
MM/DD/YY

### Return-to-Compliance Plan 2

1. Question from the Compliance Workbook for which you are reporting non-compliance: \_\_\_\_\_  
Question Number
2. Describe the Requirement (provide brief description below):
3. What corrective action will you or have you taken to return to compliance (provide brief description below):
4. Date you will return to compliance: \_\_\_\_\_  
MM/DD/YY

- Make additional copies of this form if necessary -

### Return-to-Compliance Plan 3

1. Question from the Compliance Workbook for which you are reporting non-compliance: \_\_\_\_\_  
Question  
Number
2. Describe the Requirement (provide brief description below):
3. What corrective action will you or have you taken to return to compliance (provide brief description below):
4. Date you will return to compliance: \_\_\_\_\_  
MM/DD/YY

### Return-to-Compliance Plan 4

1. Question from the Compliance Workbook for which you are reporting non-compliance: \_\_\_\_\_  
Question  
Number
2. Describe the Requirement (provide brief description below):
3. What corrective action will you or have you taken to return to compliance (provide brief description below):
4. Date you will return to compliance: \_\_\_\_\_  
MM/DD/YY

- Make additional copies of this form if necessary -