



Environmental audit checklists are designed to assist businesses by providing a low cost way of reviewing compliance with Minnesota's environmental laws and rules. Because the laws and rules are numerous and often complicated, this checklist cannot be a complete guide to your legal obligations. You may have obligations that are not covered on this checklist. If you have questions regarding the Environmental Audit Program or this checklist, please call the Small Business Environmental Assistance Program (SBEAP) at 651-282-6143 or 800-657-3938.

Date of audit \_\_\_\_\_

Company \_\_\_\_\_

Completed by/Title \_\_\_\_\_

## Environmental Audit Program Participation

A check mark in any of the boxes indicating that a requirement is not being met designates a violation of one or more regulations. To participate in the Environmental Audit Program, submit a report of your findings to the Minnesota Pollution Control Agency (MPCA). The Report Inventory form lists items that need to be included in the report and meets the audit report requirements. You do not need to submit a copy of this checklist.

Answer each question unless specifically directed otherwise.

### 1. Do you paint?

- ☐ Yes You need to complete this checklist. You also need to complete the *Vehicle Maintenance Providers: Audit Checklists* for Air Quality and Hazardous Waste. Call SBEAP for Hazardous Waste fact sheet #4.40, *Evaluating Paint and Ink Wastes*, or find it at <http://www.pca.state.mn.us/publications/w-hw4-40.pdf>.

- ☐ No You do not need to complete this checklist.

**Hint:** *Much of the waste volume in collision painting comes from the routine maintenance of booth filters, or booth coatings cleanup. If you think about it, the booth needs this maintenance, in part, because the sprayed paint is not making it properly to the body part, and is getting captured in the exhaust. Two of the best ways to reduce this problem is: 1) high transfer efficiency spray equipment; and 2) operator training. Both have a quick payback.*

## Aerosols

### 2. Do you paint with aerosols?

- ☐ Yes Continue on to the next question, but keep in mind that you also need to complete the *Vehicle Maintenance Providers: Audit Checklist – Aerosol Containers*.
- ☐ No Continue on to the next question.

## Tape, paper, cup liners

### 3. Do you have dry masking tape and paper as wastes from your spray painting operation?

- ☐ Yes These are not regulated as hazardous waste at this time. Manage these as an industrial solid waste. Follow industrial solid waste guidance outlined in Table 2 located at the end of this checklist.
- ☐ No Continue on to the next question.

### 4. Do you have plastic paint cup liners as wastes from your spray painting operation?

- ☐ Yes The liners must be empty to be eligible for disposal as solid waste.
- Use all the paint, until the liner collapses. When you remove the air gun, a small amount of residue from the gun will flow back into the liner. By hand, pour and squeeze that excess liquid paint into your hazardous waste container. If you are using catalyzed paint, after the paint has cured, just pop out the hardened residue. The liner is then an empty container that may be managed as an industrial solid waste.
  - Follow industrial solid waste guidance outlined in Table 1 located at the end of this checklist.
- ☐ No Continue on to the next question.

## ***Paint dust, chips, scrapings, and paint booth filters (arrestors)***

### **5. Do you have any of the following paint-related wastes?**

- sanding and grinding dust
- paint chips
- scrapings from paint booth floors and walls
- used paint booth filters

☐ Yes

- You need to look at the ingredients in the paints you spray on or remove from vehicle surfaces to determine how to manage properly any paint dust, chips, scrapings, and spent booth filters.
- These wastes may be hazardous wastes due to toxic metals.

☐ No Skip to the section ***Thinners and sludge from distilling thinners (question 10).***

### **6. Do you have written certification from the manufacturer that the paints do not leach any toxic metals above the maximum allowable concentrations listed in Table 1, located at the end of this checklist? (A label, letter from the manufacturer, or Material Safety Data Sheet (MSDS) is an example of written certification. Due to these metals being a concern at such low concentrations, the lack of mention in a listing of contents will not suffice. You need a definitive statement that these paints do not leach any toxic metals above maximum allowable concentrations.)**

☐ Yes The associated paint dust, chips, scrapings, and used paint booth filters are not hazardous wastes.

☐ No

- You need to test for toxic metals using the Toxicity Characteristic Leaching Procedure (TCLP).
- If the TCLP test for the dust, chips, scrapings, or used filters shows any results above the maximum allowable concentrations listed in Table 1, they are hazardous for toxic metals.
- If the TCLP test for the dust, chips, scrapings, or waste paint booth filters shows all results below the maximum allowable concentrations listed in Table 1, they are not hazardous for toxic metals.
- If the kind of paints you spray on or sand or grind off vehicles changes, you will need to re-evaluate these wastes using written certifications or TCLP results, or manage them as hazardous wastes.
- If the amount of paint in the booth filters increases, prior TCLP results may no longer be valid. You will need to re-evaluate these wastes using written certifications or TCLP results, or manage them as hazardous wastes.
- If you need help determining if these wastes are hazardous wastes, call SBEAP or your county hazardous waste staff as appropriate.

### **7. Are the paint dust, chips, scrapings, or used paint booth filters hazardous wastes?**

☐ Yes Manage them according to hazardous waste rules and complete the *Vehicle Maintenance Providers: Audit Checklist – Hazardous Waste*.

☐ No

- Manage the dust, chips, scrapings, or used filters as industrial solid wastes according to the guidance in Table 2.
- Prior to disposal, store all used filters in a covered container to keep them dry.
- Your landfill or incinerator may have other criteria you need to meet for the used filters. These criteria could include: ensuring that the filters are not dripping paint, limiting the amount of filters per load, and using special packaging and dust control measures.

**Note:** If paint dust contains toxic metals, special work requirements may be needed to protect employee health. Call the consultation office of the Occupational Safety and Health Administration, at 651-284-5060 or 800-657-3776, for assistance with this concern. This office is an educational outreach branch of the Department of Labor and Industry.

### **8. Do you store used paint filters in direct sunlight?**

☐ Yes Occasionally used paint filters will catch on fire on their own. If this actually happens, they are a hazardous waste because they are ignitable. To help prevent this, do not store them in direct sunlight.

☐ No Continue to store out of direct sunlight.

**9. Do you clean your spray guns by spraying them into your filters?**

- ☐ Yes     Used paint filters can become a hazardous waste if they come in contact with certain spent solvents commonly found in paint thinners. To prevent this from happening, do not clean your spray guns into the filters.
- ☐ No     Continue this practice.

**Hint:** You can significantly reduce the amount of solvent purchased for cleaning guns by using a closed, pressurized cleaning system. Gun washers save labor, time, and solvent while reducing workplace exposure and emissions that may require your shop to have an air permit.

**Thinners and sludge from distilling thinners**

**10. Do you have either paint thinner waste or sludge from distilling paint thinner waste?**

- ☐ Yes
- Automotive wastes related to paint thinners are almost always hazardous wastes.
  - You may assume that your wastes containing paint thinner or sludge from distilling used paint thinner are on the F-list. See Table 3. If you make this assumption, manage them according to hazardous waste rules and complete the Hazardous Waste checklist.
  - If you think your waste containing paint thinner or sludge from distilling used paint thinners might not be a hazardous waste, you will need to evaluate the paint thinner you use.
- ☐ No     Skip to the section **Unusable or excess paints**.

**11. Do you want to evaluate your paint thinner-related waste to see if it is not hazardous?**

- ☐ Yes
- Check the MSDS for your thinner to determine its contents.
  - Check Table 3 to see if your thinner is on the F-list. If it is on the F-list, it is a hazardous waste.
  - If the thinner is not on the F-list, and has a flash point below 140° Fahrenheit (60° Celsius), it is a hazardous waste because it is ignitable. It has the waste code, D001. Check the MSDS to determine the flash point of your thinner.
  - If you need help determining if this waste is a hazardous waste, call SBEAP or your county hazardous waste staff as appropriate.
- ☐ No     Assume these wastes are on the F-list. Manage them according to hazardous waste rules. You also need to complete the *Vehicle Maintenance Providers: Audit Checklist – Hazardous Waste*.

**12. Is your thinner waste and any sludge from your distillation of used thinner a hazardous waste?**

- ☐ Yes     Manage it according to hazardous waste rules. *Vehicle Maintenance Providers: Audit Checklist – Hazardous Waste*.
- ☐ No     Manage it as an industrial solid waste according to the guidance in Table 2.

**Unusable or excess paints**

**Hint:** *Inventory control and the use of paint mixing systems can significantly reduce, if not totally eliminate, excess paint.*

**13. Do you have unusable or excess paints?**

- ☐ Yes
- If the paint is simply excess material, see if your vendor will take it back. If your vendor will not take it back, check with the Minnesota Technical Assistance Program at 612-624-1300 or 800-247-0015 to see if you can use the Materials Exchange Alliance. This program arranges for leftover materials from one company to be given to another company for their use, or try to use it up by using it as a first coat or re-mixing if possible.
  - Unusable paints will have to be managed as waste paints. Waste paints may be hazardous wastes due to toxic metals or because they are ignitable. You need to evaluate them.
- ☐ No     You are done with this checklist.

**14. Do you have written certification from the manufacturer that these paints do not leach any toxic metals above the maximum allowable concentrations listed in Table 1 located below.** (A label, letter from the manufacturer, or MSDS is an example of written certification. Due to these metals being a concern at such low concentrations, the lack of mention in a listing of contents will not suffice. You need a definitive statement that the paints do not leach any toxic metals above maximum allowable concentrations.)

☐ Yes These waste paints are not hazardous wastes due to toxic metals.

☐ No

- You need to test for toxic metals using the TCLP test method.
- If the TCLP test for any of these waste paints shows any results above the maximum allowable concentrations listed in Table 1, these waste paints are hazardous wastes.
- If the TCLP test for any of these waste paints shows all results below the maximum allowable concentrations listed in Table 1, these waste paints are not hazardous wastes.

**15. Does the waste paint have a flash point below 140° Fahrenheit (60° Celsius)?** (Check the MSDS to determine the flash point of the paint.)

☐ Yes It is a hazardous waste because it is ignitable. It has the waste code, D001.

☐ No It is not a hazardous waste because it is not ignitable.

**16. Is the waste paint a hazardous waste?** (If you need help determining if your waste paint is a hazardous waste, call SBEAP or your county hazardous waste staff as appropriate.)

☐ Yes Manage it according to hazardous waste rules and complete the *Vehicle Maintenance Providers: Audit Checklist – Hazardous Waste*.

☐ No Manage it as an industrial solid waste, according to the guidance in Table 1, keeping in mind that liquid waste paint should not go in a landfill. No liquids should go in landfills. Incineration at a permitted facility would be the remaining choice.

**Table 1**

<b>Hazardous Waste Code</b>	<b>Contaminant</b>	<b>Maximum Allowable Concentration (milligrams per liter)</b>
D004	Arsenic	5.0
D005	Barium	100.0
D006	Cadmium	1.0
D007	Chromium	5.0
D008	Lead	5.0
D009	Mercury	0.2
D010	Selenium	1.0
D011	Silver	5.0

**Table 2**

### **Industrial Solid Waste Guidance for Paint Waste**

- Arrange for transport of this waste to a permitted solid waste incinerator or to a mixed municipal or industrial landfill that specifies in its industrial solid waste management plan that it will accept and can safely manage paint waste.
- Ensure that liquids do not go to landfills.
  - Find out where your hauler plans to take your solid waste.
  - Contact SBEAP at 651-282-6143 or 800-657-3938 to verify that the disposal facility has an MPCA permit.
  - Contact the operator of the disposal facility to find out what material it accepts. Verify that the facility accepts this waste.
- Store separately in marked containers for the hauler.
- Solid waste facilities may require testing prior to accepting a waste.
- Keep records of any tests or determinations used in the evaluation of paint-related wastes for at least three years. (For protection from future liability, we recommend that you never discard these records.)

Table 3

## F-Listed Solvents

*Check the solvent's Material Safety Data Sheet for a description of contents.*

### F001 Solvents (used in degreasing):

methylene chloride (dichloromethane); trichloroethylene; tetrachloroethylene (perchloroethylene); 1,1,1-trichloroethane; carbon tetrachloride; chlorinated fluorocarbons; and all spent solvent mixtures/blends used in degreasing containing, before use, a total of 10 percent or more by volume of one or more F001, F002, F004, or F005 solvents.

### F002 Solvents:

methylene chloride (dichloromethane); trichloroethylene; tetrachloroethylene (perchloroethylene); 1,1,1-trichloroethane; 1,1,2-trichloroethane; chlorobenzene; orthodichlorobenzene; trichlorofluoromethane; 1,1,2-trichloro-1,2,2-trifluoroethane; and all spent solvent mixtures/blends containing, before use, a total of 10 percent or more by volume of one or more F001, F002, F004, or F005 solvents.

### F003 Solvents:

xylene; acetone; methanol; methyl isobutyl ketone; n-butyl alcohol; ethyl acetate; ethyl benzene; ethyl ether; cyclohexanone; and all spent solvent mixtures/blends containing, before use, only the above spent solvents.

### F004 Solvents:

cresols and cresylic acid; nitrobenzene; and all spent solvent mixtures/blends containing, before use, a total of 10 percent or more by volume of one or more F001, F002, F004, or F005 solvents.

### F005 Solvents:

toluene; methyl ethyl ketone; benzene; carbon disulfide; 2-ethoxyethanol; isobutanol; 2-nitropropane; pyridine; and all spent solvent mixtures/blends containing before use, a total of 10 percent or more by volume of one or more F001, F002, F004, or F005 solvents.

## Contacts

**MPCA Web site**    <http://www.pca.state.mn.us>

**Small Business Environmental Assistance Program (SBEAP)**    651-282-6143  
800-657-3938  
[http://www.pca.state.mn.us/programs/sbap\\_p.html](http://www.pca.state.mn.us/programs/sbap_p.html)

**Minnesota Technical Assistance Program**    612-624-1300  
<http://www.mntap.umn.edu>    800-247-0015

### Metropolitan Counties Hazardous Waste Staff

Anoka County	763-422-7093
<a href="http://www.co.anoka.mn.us">http://www.co.anoka.mn.us</a>	
Carver County	952-361-1800
<a href="http://www.co.carver.mn.us">http://www.co.carver.mn.us</a>	
Dakota County	952-891-7557
<a href="http://www.co.dakota.mn.us">http://www.co.dakota.mn.us</a>	
Hennepin County	612-348-3777
<a href="http://www.hennepin.us">http://www.hennepin.us</a>	
Ramsey County	651-266-2400
<a href="http://www.co.ramsey.mn.us">http://www.co.ramsey.mn.us</a>	
Scott County	952-496-8475
<a href="http://www.co.scott.mn.us">http://www.co.scott.mn.us</a>	
Washington County	651-430-6655
<a href="http://www.co.washington.mn.us">http://www.co.washington.mn.us</a>	

### Minnesota Department of Transportation

Hazardous Materials Section    651-215-6330  
<http://www.dot.state.mn.us/cvo/hazmat.html>