Floor Management Plan
for the metal finishing industry

Background

Maintaining floors in a way that will prevent a release of hazardous materials is an on-going challenge for the metal-finishing industry. Corrosive plating liquids left on a floor will damage it. Eventually, a floor will crack or crumble and allow liquids to reach the soil beneath. Cleaning up soil under a damaged floor is difficult and expensive.

For this reason, staffs from the Minnesota Pollution Control Agency (MPCA), Twin Cities metropolitan counties and the Minnesota Association of Metal Finishers (MNAMF) have joined together to create a floor management plan template. The template is designed to help metal finishers make a plan to inspect and maintain floors. It will help them identify and deal with potential problems in a timely manner. The goal is to prevent releases that can harm human health and the environment.

Is a floor management plan required?

A floor plan is not required. Using one can help you comply with these regulations:

- Maintain your facility in a way that will prevent any unplanned, sudden or non-sudden releases of hazardous waste. (See Minn. Rules 7045.0566 subpart 2.)
- Store hazardous waste in closed, non-leaking containers marked with the words hazardous waste and a description of the contents. (See Minn. Rules 7045.0626 subpart 4 and 4a.)

Note: Temporary period, referenced in the definition of storage (Minn. R. pt. 7045.0020), is often interpreted by MPCA and metropolitan county hazardous waste staff to be 24 hours. This period may vary depending on, but not limited to, waste characteristics, amount of waste, location of storage, time and frequency of occurrence, and floor condition. Regulated parties storing for a ‘temporary period’ should ensure that facilities are being maintained and operated to minimize the possibility of any emergency or any release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

Does a floor management plan cover all regulations?

No. For example:

Facilities that have hazardous waste storage tanks and containers have other requirements that are not addressed in this document. (See Minn. Rules 7045.0528).

Facilities that have wastewater treatment or elementary neutralization systems that treat hazardous waste have other requirements that are not addressed in this document. (See Minn. Rules 7045.0652 and .0655.)

Facilities that have wastewater treatment sludge from electroplating operations (F006) or sludge, spilled waste or wastewater showing hazardous characteristics, have specific definitions that are not addressed in this document. (See Minn. Rules 7045.0135 and 40 CFR 260.10.)
Why should I develop and use a floor management plan?

A floor management plan will help you be more careful and organized in checking and caring for floors. It will help you distinguish between minor and major problems. It will help you decide how you will deal with a problem before it occurs. It will help you show regulatory officials that you are doing your best to contain waste and prevent releases.

Although a floor management plan will help you be more proactive in caring for your floors, using one does not guarantee you will never be cited for a violation. It will, however, help you identify and manage problems even if they are small, reduce their environmental impact and likely lessen the severity of a violation if it does happen. Be sure to document your efforts!

Using a floor management plan

Developing a floor management plan is a good idea. But, it will do you no good if it sits on a shelf. To get the most out of your plan, state and county hazardous waste staff strongly recommend that you:

- Keep the plan readily available and let employees know where it is.
- Train all employees to recognize minor, moderate and severe damage and who to contact if they see it; keep these training records with others.*
- Train employees that will do regular inspections and keep training records.*
- Train employees that will decide how to manage problems that may occur and keep training records.*
- Do regular inspections of floors in areas that might come in contact with chemicals and keep inspection records. A form that you can modify for your facility is available at www.pca.state.mn.us/publications/w-hw3-46c.doc.

*Note: You do not need lengthy training or cumbersome records. Often a short on-the-job session with an employee sign-off sheet is sufficient. Be sure to include the date, a short description of the training and what you expect employees to learn from it on the sign-off sheet. If you are a Large Quantity Generator, include floor inspection duties in the employee’s job description and document appropriate training in the training records for employees who have responsibility for implementing the floor management plan. For more information, see Contingency Planning for Large Quantity Generators at www.pca.state.mn.us/publications/w-hw1-08c.pdf and Personnel Training for Large Quantity Generators at www.pca.state.mn.us/waste/pubs/1-09c.pdf.

Using the template

The template is set up as a Microsoft Word document at www.pca.state.mn.us/publications/w-hw3-46b.doc. It contains sample language that you can modify to fit your facility operations. The goal is for the template to become an industry standard. So, when you can, try to keep your language similar to the template language.

Feel free to add definitions specific to your operation; but, do not change the definitions for minor, moderate and severe damage, small and large spills and release.

After modifying the sample language to fit your facility, delete the blue text.

More information

Staff from the organizations listed in the table below can answer questions and help you as you develop your floor management plan.

Table 1: Contacts for questions and help

<table>
<thead>
<tr>
<th>For help with</th>
<th>Contact</th>
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<tbody>
<tr>
<td>Minnesota regulations</td>
<td>Christine Wicks, MPCA, 651-296-8109</td>
</tr>
<tr>
<td>Twin Cities metropolitan county regulations</td>
<td>Laura Schmidt, Anoka County, 763-422-7253 Matt Petersen, Hennepin County, 612-348-6026 Aaron Chavez, Ramsey County, 651-266-1182</td>
</tr>
<tr>
<td>Ways to prevent waste and pollution</td>
<td>Karl DeWahl, Minnesota Technical Assistance Program, 612-624-4645</td>
</tr>
<tr>
<td>Hazardous waste storage tank requirements</td>
<td>Tin Tran, MPCA, 651-297-8665 Sandra Johnson, MPCA, 651-296-3276</td>
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<tr>
<td>Wastewater treatment requirements</td>
<td>Your local wastewater treatment plant (In the Twin Cities metropolitan area contact Peter Berglund at MCES, 651-602-4708)</td>
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<tr>
<td>Management systems and industry information</td>
<td>Mark Marchio, Metal Finishers Assn of Minnesota, 651-645-0787</td>
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