

Health & Safety

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Turning Your OSHA Process Safety Management Plan Into an EPA Risk Management Plan

The June 21, 1999 submittal deadline of Risk Management Plans (RMP) for metal finishers is going to be here before you know it. If the RMP rule applies to you (40 CFR Part 68), you should start planning now for compliance. It is not going to be an overnight task. But, if you have a Process Safety Management (PSM) Plan already prepared for OSHA, your task will be much easier.

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Common Chemicals & Associated Thresholds

Chemical Ammonia (anhydrous) Hydrochloric acid (30% or greater 19.2 Be) Hydrofluoric acid (50% or greater) Sulfur dioxide (anhydrous) Nitric acid (80% or greater, 22.5 Be) Acetylene Propane Chlorine

RMP Threshold Quantity, lb 10,000 15,000 (~1,500 gal) 1,000 5,000 15,000 (~1,500 gal) 10,000 10,000 2,500

* The abbreviated list above is merely a guideline for metal finishers. Please consult the List of Regulated Toxic Substances and Threshold Quantities in 40 CFR Part 68.130 to be sure you have reviewed all the chemicals and your applicability.

What is an RMP?

Under the Clean Air Act Section 112(r) companies must submit to the U.S. EPA a Risk Management Plan that provides the community and regulators information about the hazardous chemicals on-site, how they are used, the procedures you have in place to prevent any chemical releases, and "worst-case scenarios" that describe what could potentially happen if there were a chemical release.

Fortunately, not all metal finishers will be required to file this lengthy document, as long as they fall below the chemical storage thresholds. On the list there are 77 different toxic substances, 63 flammable substances, and all DOT Class 1, Division 1.1 high-explosive, hazardous materials. The accompanying table summarizes common chemicals used by metal finishers and the associated RMP thresholds. Exemptions to Filing an RMP There are exemptions for having to file an RMP:

- Mixtures that contain less than 1% by weight of a regulated toxic material
- Mixtures that contain less than 1% by weight of a regulated flammable substance
- Laboratory activities involving chemicals
- Agricultural activities where the chemicals are used as nutrients

If you fall under the OSHA PSM threshold, you most likely will need to file an RMP because the PSM thresholds are lower than the RMPs. The good news is that if you have a Process Safety Management Plan implemented already, you will need to only do a little work to expand it into a RMP. The biggest difference in the two plans is that OSHA's PSM is primarily concerned with protecting workers within the facility, whereas the RMP addresses public risk (*i.e.*, the on- and off-site consequences of accidental releases). The plans are very similar and EPA says that facilities that already have a PSM plan can use the same document, so long as you add a few elements to your existing plan. They are as follows:

- 1. Hazard Assessments—Schedule a meeting with your safety committee and document the hazards that exist at your facility, as well as when you transport hazardous material outside your facility.
- 2. Chemical Inventory—Provide a complete chemical inventory with maximum quantities on-site needs to be included.
- 3. "Worst-case" and "Alternative" Scenarios—Describe the highestrisk accident and the most likely accidents that could take place at the facility with flammable, toxic

and explosive chemicals that are in use.

- 4. Five-year accident/spill history—Describe specific information on any deaths, injuries, evacuations, property and/or environmental damage that has occurred related to your facility.
- 5. Training and Safety Precautions—Describe what is in your prevention program for safehandling of chemicals, process controls, various safety procedures, audits and a schedule for refresher training.
- 6. Emergency Response Program— Describe the procedure for handling emergencies. This should be in a concise format for easy reference (*i.e.*, #1: Evacuate facility, #2: Notify Fire Department, Local Emergency Response Committee, etc.).
- 7. Certification and Registration— You will need to submit or "register" a certified copy of the

RMP/PSM with EPA and with state and local emergency response commissions (the same agencies your facility submits the Tier I or Tier II reports). Most facilities have not submitted their PSM plan to OSHA or any other agency. The RMP needs to be submitted no later than June 21, 1999.

By combining your Process Safety Management Plan and your Risk Management Plan, you will have one comprehensive plan to prevent accidents from affecting your employees and the public. PESF

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