Who Must Comply?

The facilities the RMP rule applies to are termed “stationary sources,” as the rule does not apply to regulated substances under transportation.

Any facility that could be a source of an accidental release is a “stationary source.” If the facility has a process that uses or stores materials listed in the EPA regulated substances list in quantities greater than threshold quantity, the facility is an “affected stationary source” subject to the RMP rule.

The term “process” means any activity where regulated substances are

- manufactured
- used
- stored
- handled, or
- transported on-site

A process includes vessels that are interconnected and separate vessels if located such that they could potentially be involved in a single release.

EPA estimates that approximately 66,000 facilities will be affected by the Risk Management Program rule. These can include

- chemical manufacturers
- petroleum refineries
- manufacturing facilities
- agricultural chemical retailers
• public drinking water and wastewater treatment systems
• utilities
• propane retailers
• cold storage facilities
• warehousing facilities
• military and energy installations

Some states will be taking on the role of EPA in enforcing the risk management program rule. They are allowed to add requirements over and above EPA's basic rule. Verify any discrepancies between the EPA RMP rule and your state's environmental authority before developing your plan.

Overview—Three Basic Parts

The Environmental Protection Agency's (EPA's) Risk Management Program (RMP) rule (40 CFR 68) requires stationary sources to implement a risk management program and develop a risk management plan (RMPlan). "RMPlan" is a term coined by EPA and is short for risk management plan. It is a summary description of the risk management program activities carried out in the facility. A facility must submit its RMPlan to a central location from which the RMPlan will be available to regulators, local emergency planners, and the public.

A risk management program consists of three parts. They are

• a hazard assessment,
• a prevention program, and
• an emergency response program.

Successful compliance with the rule requires a stationary source to take on two additional tasks to ensure compliance initially and over time:

1. Establish an overall management system to develop and maintain the three components in an up-to-date condition.
2. Submit an RMPlan initially and resubmit updates as required by the rule.

Contents of the Risk Management Program Rule

The RMP rule was first published on June 20, 1996, in the Federal Register (FR) and became effective August 19, 1996. It contains both
preamble language that explains EPA's goals for writing the rule and the regulatory text. EPA has published several guidance documents for companies that fall under the rule to use in their compliance efforts. Industry groups have also produced documents and model plans to assist their particular target audience in meeting the requirements of the rule. The American Petroleum Institute (API) has developed an example risk management plan for petroleum refineries, exploration, and production facilities, and has also collaborated with the Chemical Manufacturers Association (CMA) to produce an overall RMP compliance guide that focuses on all provisions of the RMP rule. Stationary sources should consider using all of these resources when determining their coverage and when developing compliance strategies and implementation plans. Local emergency planning committees with stationary sources in their response area may find these additional resources useful as well. The RMP rule continues to evolve. In order to stay informed of the latest example RMPlans, assistance, software and interpretations, regularly access the CEPPO website:

http://www.epa.gov/swercepp/acc-pre.html

The RMP rule has eight subparts designated A through H. It also provides an appendix that lists toxic endpoints for use in hazard assessments. The titles of the subparts are listed below:

- Subpart A—General
- Subpart B—Hazard Assessment
- Subpart C—Program 2 Prevention Program
- Subpart D—Program 3 Prevention Program
- Subpart E—Emergency Response
- Subpart F—Regulated Substances for Accidental Release Prevention
- Subpart G—Risk Management Plan
- Subpart H—Other Requirements

A brief description of the contents within each subpart is given in the following text. Refer to the text of the RMP rule in the appendix for more detail.

SUBPART A—GENERAL

This segment describes the applicability requirements of the RMP rule. It sets the three-year compliance deadline; defines three different RMP program levels, including eligibility criteria and necessary work; and
requires facilities to have a management system to control implementation of their risk management program. Program 1 is the least stringent level of RMP requirements and is intended for "lower hazard" processes. A process qualifies for Program 1 if

- it has not had an accident with an off-site effect in the past five years,
- the worst-case scenario (WCS) endpoint distance determined by accepted modeling techniques does not reach the nearest public receptor of concern, and
- emergency response activities have been coordinated with local emergency planning committees.

A process is in Program 3 if it does not qualify for Program 1 and it is either

- covered by the Occupational Safety and Health Administration's (OSHA's) Process Safety Management standard or
- classified within one of ten EPA selected North American Industrial Classification System (NAICS) codes. These are

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>325181</td>
<td>Alkali and chlorine</td>
</tr>
<tr>
<td>325211</td>
<td>Plastics and resins</td>
</tr>
<tr>
<td>325311</td>
<td>Nitrogen fertilizers</td>
</tr>
<tr>
<td>32532</td>
<td>Pesticide and other agricultural chemicals</td>
</tr>
<tr>
<td>32411</td>
<td>Petroleum refineries</td>
</tr>
<tr>
<td>32211</td>
<td>Pulp mills only</td>
</tr>
<tr>
<td>32511</td>
<td>Petrochemical</td>
</tr>
<tr>
<td>325188</td>
<td>All other inorganic chemical manufacturing</td>
</tr>
<tr>
<td>325199</td>
<td>All other basic organic chemical manufacturing</td>
</tr>
<tr>
<td>325192</td>
<td>Other (covers cyclic crude and intermediate manufacturing)</td>
</tr>
</tbody>
</table>

If a covered process is not in Program 1 or Program 3, then it is eligible for Program 2, a streamlined version of Program 3 risk management. Chapter 3 contains a simplified flow chart that a facility can use to determine coverage under the rule and which program level they may be considered.
SUBPART B—HAZARD ASSESSMENT

This part of the rule consists of two parts:

- performing an off-site consequence analysis (OCA) of potential accidental releases and
- compiling a five-year history of accidental releases.

The off-site consequence analysis provides an estimate of the distance that a toxic vapor cloud or the effects from a fire or explosion could travel from a site. Two types of scenarios are defined: worst-case scenarios (WCSs) and alternative release scenarios (ARSs). Definitions of WCS release conditions and modeling parameters are prescribed. Worst-case scenarios are modeled on incidents of extremely low probability. Alternative release scenarios, however, allow a stationary source to model a more likely incident. This is of particular interest when coordinating an emergency response plan with LEPCs as the alternative release scenarios become useful tools for emergency planning and provide realistic drill scenarios.

A facility must estimate the residential population within a circle defined by the distance calculated to the appropriate hazard endpoint centered at the assumed point of release. U.S. Census data are used to determine this number. If institutions, parks, recreational areas, major commercial areas, and sensitive environmental receptors are within the circle, they must be noted. Population numbers do not need to be collected for these items. Off-site consequence analysis data must be updated every five years, or more often if stationary source changes raise or lower the endpoint distance by a factor of two or greater.

SUBPART C—PROGRAM 2 PREVENTION PROGRAM

This segment details the prevention program requirements for Program 2 processes. The seven elements are

- Safety information
- Hazard review
- Operating procedures
- Training
- Maintenance
- Compliance audits
- Incident investigation
Each of these elements has distinct requirements. When compared to OSHA PSM counterparts however, they are not always as detailed.

**SUBPART D—PROGRAM 3 PREVENTION PROGRAM**

In this subpart, the prevention program requirements for Program 3 processes are specified, including the following twelve elements:

- Process safety information
- Process hazard analysis (PHA)
- Operating procedures
- Training
- Mechanical integrity
- Management of change
- Pre-startup review
- Compliance audits
- Incident investigation
- Employee participation
- Hot work permit
- Contractors

The requirements in each element are essentially identical to their OSHA PSM counterparts. EPA has made a few terminology changes to ensure that facilities understand that EPA expects the prevention program to protect the public and the environment as well as workers. The primary difference is that PHAs must document consideration of known deviations that could have off-site impact.

**SUBPART E—EMERGENCY RESPONSE**

This segment of the rule describes emergency response requirements. Program 2 and 3 stationary sources whose employees are expected to respond to accidental releases of regulated substances must develop an emergency response plan designed to protect the public and the environment. Emergency response activities must also be coordinated with the community emergency planners and responders. Program 2 and 3 sites whose employees will not respond to accidental releases are not required to prepare an emergency response plan, but they must have a system to notify external emergency responders in the event of an accident and to coordinate plans. All covered facilities must respond to any requests from local emergency planners or responders for more
information to assist with in preparing or revising the community emergency response plan.

SUBPART F—REGULATED SUBSTANCES FOR ACCIDENTAL RELEASE PREVENTION

This subpart contains the EPA list of regulated substances, their threshold quantities, and specific exemptions. The EPA list contains 77 toxic substances and 63 flammable substances. Except for one substance, Methyl Chloride, the EPA threshold quantities are equal to or greater than the OSHA PSM threshold quantities. EPA describes a detailed method for determining whether a mixture of regulated and non-regulated substances is covered.

The RMP rule applies only to “stationary sources”; transportation activities such as pipelines and storage incident to transportation are currently not covered by the RMP rule. Additional exemptions to the rule are as follows:

- If a regulated substance is present in a concentration below one percent by weight of a mixture, the mixture need not be considered for determining a threshold quantity of the regulated substance.
- Gasoline, in distribution or related storage for use as a fuel, need not be considered when determining whether a threshold quantity of a substance is present at a stationary source.
- Naturally occurring hydrocarbon mixtures are exempted, including any combination of the following: condensate, crude oil, field gas, and produced water
- Also exempted are exploration and production (E&P) facilities on the outer continental shelf (OCS)

SUBPART G—RISK MANAGEMENT PLAN

This segment details submitting the RMPlan, updating it, and the content requirements for an RMPlan. The RMPlan must contain three major sections:

1. an executive summary;
2. a single certification that the information is true, accurate, and complete or in the case of program 1 processes, the required certification statement; and
3. a detailed list of data elements broken down into the following five categories:
   • Registration information
   • Off-site consequence analysis
   • Five-year accident history
   • Prevention program (for Programs 2 and 3)
   • Emergency response program

The original RMPlan for a stationary source must be submitted by the latest of the following dates:

- June 21, 1999;
- three years after the date on which a new regulated substance is listed; or
- the date on which a process is first covered.

If nonelectronic submission is used, EPA will use the postmark date on the submission as the official compliance date. It will be used to start the clock for the five-year update requirement. The RMP compliance center will track both postmark date and date received. In order to be in compliance, your submittal must be postmarked by June 21, 1999. If the postmark is illegible, the EPA will use the date received as the compliance date.

The RMPlan must be updated at least every five years or within six months, if specific changes occur that affect the basis of the RMP. EPA intends that facilities submit the RMPlan to a central point for access by regulators, local emergency planners, and the public. EPA has made available RMP*Submit software. It is a program designed to ensure properly formatted RMPlan submissions. It is currently available for testing prior to its final release.

An example RMPlan is provided in Appendix E of this text.

SUBPART H—OTHER REQUIREMENTS

This subpart specifies the rule’s recordkeeping requirements, availability of information to the public, the relationship between the RMP rule and air permits, and audits. Facilities must maintain RMP records for at least five years. The RMPlan is to be made available to the public, although any government classified information is protected by law.

If your facility holds a Title V Part 70 or 71 operating permit, the RMP rule is considered an “applicable requirement” under the permit. However, coverage under the RMP rule does not mean that you must
necessarily obtain an air permit. It is important to note that the RMPlan is not a part of the air permit itself. Facilities with air permits must revise them to include either

- a certification that a complete RMPlan has been submitted or
- a schedule for complying with RMP rule requirements.

The General Duty Clause

The "general duty" clause of the CAA Amendments of 1990 states the following:

It shall be the objective of the regulations and programs authorized under this subsection to prevent the accidental release and to minimize the consequences of any such release of any substance listed pursuant to paragraph (3) or any other extremely hazardous substance. The owners and operators of stationary sources producing, processing, handling or storing such substances have a general duty in the same manner and to the same extent as section 654, title 29 of the United States Code, to identify hazards which may result from such releases using appropriate hazard assessment techniques, to design and maintain a safe facility taking such steps as are necessary to prevent releases, and to minimize the consequences of accidental releases which do occur.

The general duty clause applies to sites that contain RMP-regulated substances as well as sites that do not contain regulated substances (or do not contain regulated substances at or above the threshold quantity) but do contain other extremely hazardous substances (EHSs) not on the RMP list.

It is important to note that the definition of an extremely hazardous substance is not just limited to the EHSs listed in the Emergency Planning and Community Right-to-Know Act (EPCRA) Section 302. EPA is still determining how it will interpret and apply the general duty clause.

A facility that operates processes containing EHSs that are not considered regulated substances under RMP rule may wish to briefly summarize the risk management efforts applied to these processes. These risk management summaries could serve as tools for indicating compliance with the "general duty" requirements of the CAA and for communicating your risk management efforts to the public.

When does the general duty clause come into play? If a facility not required to follow RMP due to having no regulated substances on-site releases a non-RMP-listed extremely hazardous substance, and there
are off-site impacts, the company may be held to the RMP standards during EPA's investigation of the incident.

The questions to ask are as follows:

- If the site contains any listed regulated substances less than threshold quantity, could they have an off-site impact?
- If the site contains any extremely hazardous substances (of any quantity), could they have off-site impact?

If both answers are no, document your decision. If the answer to either or both questions is yes, then you must do the following:

- Analyze the process for specific off-site impact.
- Upgrade the Emergency Response Program if needed.
- Upgrade prevention program activities connected with the substances if needed.
- Develop a communications plan appropriate for the substance.

This information generated would document efforts taken in compliance with the requirements of the general duty clause.

If your site is open to this situation, it may be helpful to alert management to this potential exposure. They may choose to look at the risks associated with the affected process under an RMP-based microscope and take actions to enhance public safety.
### Program Requirements Summary

<table>
<thead>
<tr>
<th>Scenario</th>
<th>PROGRAM LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worst-Case Release Scenario</td>
<td>1 2 3</td>
</tr>
<tr>
<td>• One toxic or flammable for each Program 1 process</td>
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</tr>
<tr>
<td>• Single toxic for all covered Program 2 or 3 processes (see note)</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>• Single flammable for all covered Program 2 or 3 processes (see note)</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Alternative Release Scenario</td>
<td></td>
</tr>
<tr>
<td>• At least one for each toxic in each covered Program 2 or 3 processes</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>• At least one to cover all flammables covered Program 2 or 3 processes</td>
<td>✓ ✓</td>
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<tr>
<td>Five-Year Accident History</td>
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<tr>
<td>Management System</td>
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<tr>
<td>Prevention Program</td>
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</tr>
<tr>
<td>Emergency Response</td>
<td></td>
</tr>
<tr>
<td>• Local agencies or facility provide; site must coordinate with response agencies</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>• Develop and implement site program</td>
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<tr>
<td>Submission of RMPlan</td>
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<tr>
<td>• Certification statement</td>
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<tr>
<td>• Worst-case analysis results</td>
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<tr>
<td>• Alternative case analysis results</td>
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<tr>
<td>• Five-year accident history</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>• Data on prevention program elements</td>
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</tr>
</tbody>
</table>

**Note:** Must submit additional worst-case scenarios for a hazard class if different public receptors are potentially affected.