



CHEMICAL EMERGENCY PREVENTION & PLANNING

Newsletter



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US EPA Region 10

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CHEMICAL EMERGENCY PREVENTION & PLANNING Newsletter

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[R10 RMP Webpage](#)

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Editor's note: A concern often raised at our risk management training is "My manager doesn't understand all the requirements of the RMP." This issue of CEPP addresses the "What, Why and How" of management's role in your safety program. Feel free to forward it to the boss.

Safety Culture and Management:

Creating a workplace that values and embraces safety programs is unfortunately not a commodity to be purchased, but rather an atmosphere to be encouraged by plant managers. Without the buy-in of everyone from upper management down, implementing an effective safety culture is difficult. Managers must develop relationships with the environmental, health and safety practitioners in the plant, and help each individual understand the role process safety plays in their plant.

Specifically, companies need four critical components if they are going to be successful in establishing a safety culture – credibility, commitment, accountability and rigor. What builds that credibility is continual senior management commitment driven and adopted throughout the organization. Most companies have some management commitment in words and deeds, but it must result in action and funding. Without this, a safety program cannot survive.

Management and your RMP:

Your Risk Management Program addresses management responsibility in **(§68.15) Requirement for a Management System** detailed below.

If you have at least one Program 2 or Program 3 process the management system provision in § 68.15 requires you to:

Develop a management system to oversee the implementation of the risk management program elements;

Designate a qualified person or position with the overall responsibility for the development, implementation, and integration of the risk management program elements; and

Document the names of people or positions and define the lines of authority through an organizational chart or other similar document, if you assign responsibility for implementing individual requirements of the risk management program to people or positions other than the person or position with overall responsibility for the risk management program. [See SAMPLE Management Plan on Page 2.](#)

Management commitment to process safety is a critical element of any facility's risk management program. Since the program requires ongoing implementation of accident prevention and emergency response measures, management commitment does not end when the risk management plan is submitted to EPA. For process safety to be a constant priority, facility personnel must remain committed to every element of the risk management program.



REPORT

CHEMICAL or OIL SPILLS
to the NATIONAL RESPONSE CENTER

1-800-424-8802

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By satisfying the requirements of this provision, you are ensuring that:

- The risk management program elements are integrated and implemented on an ongoing basis; and
- All groups within a source understand the lines of responsibility and communication.

For more information: [RMP Guidance, Management](#)

SAMPLE: Management Responsibilities for RMP/PSM - Program 3

Elements of RMP/PSM	Responsible Parties
1) Management System:	A) President/CEO/Operations Manager, etc – Overall Responsibility for the development, implementation and integration of the risk management program elements.
Each Section Below Reports to the above (President/CEO/Operations Manager, etc.)	
2) Employee Participation	A) Maintenance and Refrigeration Mgr. B) Engineering Foreman C) Safety Mgr. D) Training Coordinator
3) Process Safety Information:	A) Maintenance and Refrigeration Mgr. B) Engineering Foreman C) Safety Mgr.
4) Process Hazard Analysis:	A) Maintenance and Refrigeration Mgr. B) Engineering Foreman C) Refrigeration Engineers D) Safety Mgr.
5) Operating Procedures:	A) Maintenance and Refrigeration Mgr. B) Engineering Foreman C) Safety Mgr.
6) Lockout/Tagout:	A) Maintenance and Refrigeration Mgr. B) Engineering Foreman C) Maintenance Foreman D) Safety Mgr.
7) Site Security:	A) President/CEO B) Security Mgr. C) Maintenance and Refrigeration Mgr. D) Plant Managers
8) Line Opening/Process Equipment:	A) Maintenance and Refrigeration Mgr. B) Engineering Foreman C) Safety Mgr.
9) Training:	A) Maintenance and Refrigeration Mgr. B) Engineering Foreman C) Safety Mgr. D) Training Coordinator
10) Mechanical Integrity:	A) Maintenance and Refrigeration Mgr. B) Engineering Foreman C) Safety Mgr.
11) Preventative Maintenance:	A) Maintenance and Refrigeration Mgr. B) Engineering Foreman C) Safety Mgr.
12) Management of Change	A) Maintenance and Refrigeration Mgr. B) Engineering Foreman C) Safety Mgr.
13) Pre-Startup Safety Review	A) Maintenance and Refrigeration Mgr. B) Engineering Foreman , C) Safety Mgr.
14) Compliance Audits:	A) Maintenance and Refrigeration Mgr. B) Engineering Foreman C) Safety Mgr.
15) Incident Investigations	A) Maintenance and Refrigeration Mgr. B) Engineering Foreman C) Plant Managers D) Safety Mgr.
16) Hot Work, Permits	A) Maintenance and Refrigeration Mgr. B) Engineering Foreman C) Maintenance Foreman D) Safety Mgr
17) Contractors:	A) Maintenance and Refrigeration Mgr. B) Engineering Foreman C) Maintenance Foreman D) Purchasing Agent
18) Emergency Action Program	A) President/CEO B) Safety Mgr.
19) Trade Secrets	Not applicable

Date Last Revised: _____

Quantifying the Connection between Safety and Productivity

(Reprinted with permission: Sustainable Plant 10/11/11 www.sustainableplant.com)

Manufacturing historically has viewed implementation of safety practices as punitive actions or compliance activities. Today, safety represents opportunity to gain a competitive edge. For best-in-class manufacturers, the combination of global safety standards, advanced safety technologies and innovative design approaches are turning safety into a core function that delivers significant business and economic value. This includes financial returns beyond the benefits of reducing costs associated with incidents and medical expenses.

In fact, best-in-class companies are the safest and most productive. A recent Aberdeen Group study, cosponsored by Rockwell Automation, measured the relationship between automation safety and productivity and showed the best-in-class companies had 5 percent higher Overall Equipment Effectiveness (OEE), 4 percent less unscheduled downtime, and significantly fewer injuries and repeat accidents compared to peers.

Overall Equipment Effectiveness (OEE) is a widely used measurement of how well a manufacturing plant performs relative to its designed production capacity. These forward-thinking manufacturers understand that a well-designed safety system can help improve their efficiency, productivity, and business and machine performance – ultimately helping reduce costs and differentiate themselves in the marketplace.

So, how do best-in-class manufacturers provide a safer working environment that is compliant with applicable standards and supportive of a productive and competitive operation? At the core, they comply with safety standards without jeopardizing productivity by combining safety and operational systems through a risk management approach. The most successful risk management approaches included a strong safety culture, formalized risk management strategy and technologies that integrate safety systems with the standard automation system.

Defining Best-In-Class The Aberdeen Group study defines best-in-class manufacturers with four key performance indicators (KPIs) deemed critical to the success of the safety program as well as plant safety. They include the OEE, repeat accident rate, injury frequency rate and unscheduled asset downtime.

Best-in-class manufacturers average five percent higher OEE and four percent less unscheduled downtime than industry averages, while having significantly fewer injuries and repeat accidents than their competitors. Just as important, those manufacturers also average significantly fewer injuries (1 in 2000 employees vs. nearly 1 in 100 employees) and repeat accidents (0.2 percent vs. 2.4 percent) than industry average manufacturers. This makes for a much less stressful and more productive work environment – and reduces liabilities.



TEN QUESTIONS EVERY MANAGER SHOULD ASK

(Reprinted with permission: Industrial Refrigeration Consortium <http://www.irc.wisc.edu/>)

Here are ten questions you should ask your staff who are responsible for PSM. If your staff can answer these questions “correctly” without researching the answers, you can most likely feel confident that the PSM program is in good hands. If not, you should be concerned and begin to further probe on the health state of your organization’s PSM program.

1. When was our last compliance audit?

(Should be 3 years or less)

2. Can you show me the closeout of recommendations from the last compliance audit?

(Documentation must be available that shows all recommendations have been dealt with in a timely manner.)

3. Can you provide me a copy of the most recent incident report and documentation that shows how we closed out recommendations from the incident report?

(Expect there to be more than one incident report from the last five years. At a minimum, the incident report should include: date of incident, date the investigation began, listing of the incident investigation team, description of the incident that occurred, factors contributing to the incident, recommendations for preventing future similar incidents. There should be documentation that describes changes made in response to the incident report recommendations.)

4. When was our last Process Hazard Analysis (PHA) conducted and can you show me documentation that closes out the recommendations from the last PHA?

(PHA should have been conducted and/or re-validated in a period no later than five years. There should be documentation that describes changes made in response to the recommendations that arose from the PHA.)

5. How often do we certify our plant’s written operating procedures for the covered process?

(First, your plant must have written operating procedures for the covered process. Next, the

written operating procedures must be certified that they are current and accurate annually.)

6. What training program do we have for our operators and what are the means used to verify they have understood the training?

(At an absolute minimum, the initial training must include an overview of the chemicals being used and the process. The training program must also cover plant-specific written operating procedures. Look for credible means to verify understanding: testing, demonstration, etc. Also, make sure that operators have had refresher training at least every three years.)

7. How often do we do refresher training?

(The PSM standard requires refresher training on an interval not to exceed 3 years.)

8. Based on our plant’s mechanical integrity program, what is the next piece of equipment scheduled for retirement and when is it scheduled to come out of service?

(Although they may have to look this up, they should have a firm answer and you should not get a blank stare when you ask the question.)

9. What criteria do we use to evaluate contractors that work on our covered process?

(There should be established criteria that may include: Experience Modification Rating (EMR), lost work injury or recordable cases, industry experience, etc.)

10. What was the last change made to our system and can you show me the documentation for that change?

(There should be a “Management of Change” that was initiated before the change was implemented, all recommendations addressed and a Pre-Startup Safety Review completed before startup of the change, and the MOC approved and signed off by those responsible for various PSM elements.)

For more information: IRC is based at UW – Madison. Focusing on Ammonia Refrigeration, their newsletter Cold Front is available at: <https://www.irc.wisc.edu/>

EPCRA Amendments to Tier I and Tier II

Amendments to the Emergency and Hazardous Chemical Inventory Forms - (Tier I and Tier II)

On July 3, 2012, EPA amended the Emergency and Hazardous Chemical Inventory Forms under Section 312 of the Emergency Planning and Community Right-to-Know Act (EPCRA) to add new data elements and revise some existing data elements. The amendments are intended to meet the purpose of EPCRA, which is "...to encourage and support state and local planning for emergencies caused by the release of hazardous chemicals and to provide citizens and governments with information concerning potential chemical hazards present in their communities."

The revisions:

- respond to stakeholder requests, EPA is proposing to add new data elements to the Tier I and Tier II forms in an effort to make the forms more useful for state, local, and tribal agencies;
- make reporting easier for facilities;
- are intended to provide clarity in reporting while maintaining protection of human health and the environment; and
- may impose minimal reporting burden on facilities since the data elements proposed are readily available to the facility. Revising the existing data elements will make the forms more user-friendly and ease reporting requirements for facilities.

Organizations and facilities subject to section 312 of EPCRA and its implementing regulations found in 40 CFR 370 may be affected by this rule.

<http://www.epa.gov/oem/content/epcra/index.htm#prop>

EPA Fines Washington Fruit Companies

WENATCHEE, Wash. -- Fruit packing companies in Wenatchee and Yakima have agreed to pay fines for failing to meet risk management plan requirements under the Clean Air Act, according to the U.S. Environmental Protection Agency.

Dovex Fruit Co., Wenatchee, has been fined \$134,613 for failing to meet risk management requirements for equipment maintenance since August 2008 and has corrected the violations, EPA said. In 2008, Dovex was fined \$98,241 for failing to submit a risk management plan since 2003. Dovex was acquired by Stemilt Growers Inc., Wenatchee, in March 2010.

Clasen Family Co., a cold storage fruit company with facilities in Union Gap and Yakima, will pay a fine of \$17,030 for failing to submit a risk management plan since 2004, EPA said. It will also spend at least \$58,000 installing equipment to reduce the risk of ammonia releases and improves emergency response in case of accidental leaks, EPA said.

Both companies use more than 10,000 pounds of anhydrous ammonia, one of the most potentially dangerous chemicals used in refrigeration and agriculture. The Clean Air Act requires them to develop risk management programs which assess hazards and includes accident prevention and emergency response.

Where Do I Go For More Information?

RMP Materials EPA's Web site: <http://www.epa.gov/emergencies/content/rmp/index.htm> includes the Risk Management Program rule, Off-Site Consequence Analysis specific guidance and calculator, the list of regulated substances, fact sheets, guidance documents, industry-specific model plans, FAQs, the *RMP* eSubmit Users' Manual*, and other information.

EPA RMP Region 10

RMP Coordinator: Javier Morales 206-553-1255

EPA Region 10 RMP Website: <http://yosemite.epa.gov/R10/airpage.nsf/Enforcement/rmp>

Superfund, TRI, EPCRA, RMP & Oil Information Center - The information center can also answer questions related to Clean Air Act Section 112(r) and RMP reporting requirements. Contact the RCRA, Superfund, and EPCRA Call Center for your policy, regulatory compliance, and reporting requirements questions.

800-424-9346 Toll Free or TDD 800-553-7672
Monday – Thursday: 10:00 AM – 3:00 PM Eastern Time
Extended Hours of Operation (May, June and July): Monday – Friday: 9:00 AM – 5:00 PM Eastern Time (Closed Federal Holidays) <http://www.epa.gov/superfund/contacts/infocenter/>

RMP* eSubmit Software Support Contact the RMP Reporting Center for specific software questions about RMP* eSubmit. (703) 227-7650 (phone) Monday – Friday: 8:00 a.m. – 4:30 PM ET. Closed Federal Holidays RMPRC@epacdx.net (e-mail)

LISTSERVS EPA maintains numerous listservs to keep the public, state and local officials, and industry up to date, including several that pertain to emergency management. You can sign up for our [listserv](https://lists.epa.gov/read/all_forums/subscribe?name=callcenter_oswer) to receive periodic updates: https://lists.epa.gov/read/all_forums/subscribe?name=callcenter_oswer

This newsletter provides information on the EPA Risk Management Program, EPCRA, PCC/FRP and other issues relating to Accidental Release Prevention Requirements. The articles contained herein are provided for general purposes only. EPA does not accept responsibility for any errors or omissions or results of any actions based upon this information. Please consult the applicable regulations when determining compliance. Mention of trade names, products, or services does not convey, and should not be interpreted as conveying official EPA approval, endorsement, or recommendation. The information should be used as a reference tool, not as a definitive source of compliance information. Compliance regulations are published in 40 CFR Part 68 for CAA Section 112(r) Risk Management Program, 40 CFR Part 355/370 for EPCRA, and 40 CFR Part 112.2 for SPCC/FRP.