

## RMP News

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### Is Your Site Secure?

In light of the events on September 11, Americans are increasingly concerned about terrorism. If you store or process hazardous substances, you may be concerned about the threat of a deliberate chemical release or other criminal activity at your site. Unfortunately, your fears may not be unfounded. At the end of November, the FBI warned the oil and gas industry of a planned attack against natural gas pipelines. To minimize the threat of criminal activity, your facility should have security measures in place.

The US Environmental Protection Agency issued a chemical safety alert outlining site security measures and sources of additional information. This document is located online at <http://www.epa.gov/ceppo/pubs/secale.pdf>. Some of the measures are summarized below:

**Prevent Intrusion**—Prevent intruders from entering your property by using fences, gates, locked doors, restricted traffic, and security procedures.

**Limit Damage**—A well-designed facility will limit equipment damage, determine safety needs and may

reduce the amount of hazardous substances on site. Where practicable, physically protect process equipment using buffers, blast resistant structures, collision barriers and enclosures. To protect sensitive information and computer systems, limit access and provide backup to systems. Consider the use of excess flow valves and chemical monitors. Maintain procedures to operate safely and to shutdown processes in the event of an emergency. Practice emergency procedures in collaboration with the local emergency planning committee (LEPC), fire and police.

**Evaluate Site**—Evaluate current security measures and whether measures adequately reduce risks at your site.

The US Environmental Protection Agency has also provided additional information about pesticide safety and site security at [http://www.epa.gov/pesticides/citizens/pest\\_secu\\_alert.htm](http://www.epa.gov/pesticides/citizens/pest_secu_alert.htm).

The North Carolina Governor's web site provides information on current safety issues and the latest updates on North Carolina's security efforts. This site contains answers to frequently asked questions on current public health and safety issues, links to other local, state and federal resources and information concerning what North Carolina is doing to increase security and is located at [http://www.ncgov.com/asp/subpages/safety\\_security.asp](http://www.ncgov.com/asp/subpages/safety_security.asp).

### Deliberate Releases and Role of LEPCs

Local Emergency Planning Committees (LEPCs) prepare for incidents involving accidental chemical releases in their community. Due to the increased threat of terrorist incidents involving chemical and biological agents, LEPCs may incorporate deliberate releases into community plans using the same principles as accidental releases. The US Environmental Protection Agency has created a fact sheet offering suggestions for addressing terrorism in the local plan. The document is available online at [www.epa.gov/ceppo/factsheets/lepct.pdf](http://www.epa.gov/ceppo/factsheets/lepct.pdf) or by contacting the North Carolina Chemical Accident Prevention Program.

## ***List of Lists Update***

In October 2001, the US Environmental Protection Agency updated the Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-to-Know Act (EPCRA) and Section 112(r) of the Clean Air Act (also known as the List of Lists). This useful reference lists substances and threshold quantities regulated by Resource Conservation and Recovery Act (RCRA), Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), Emergency Planning and Community Right-to-Know Act (EPCRA) and Section 112(r) of the Clean Air Act. The information in the reference provides a guide for submitting reports under sections 302 (EHS), 304 (emergency notification), 312 (Tier I or II) or 313 (TRI) of EPCRA and applicability under CAA section 112(r). These lists can be found online at <http://130.11.53.73/lo1> or by contacting the North Carolina Chemical Accident Prevention Program.

## ***Updating Your Risk Management Program***

—Markus Elliott, Fayetteville Regional Air Quality Office

If your facility is regulated by the Risk Management rule, you are required to periodically update your program. When and whether the update requires resubmission to the EPA depends on what changes are made at your facility and the date of original submission:

### **PROGRAM 2 FACILITIES**

*OCA Update and Review* (§ 68.36)—Update at least every five years or within six months if change doubles or reduces by half distance to endpoint in worst-case scenario

*Safety Information* (§ 68.48 (c))—Update if change makes the safety information inaccurate

*Hazard Review* (§ 68.50 (d))—Update at least every five years and review whenever a major change occurs

*Refresher Training* (§ 68.54 (b))—Provide refresher at least every three years, more frequently if necessary

*Incident Investigation* (§ 68.60)—Initiate within 48 hours, document and maintain results for five years

*Emergency Response Plan* (§ 68.95)—Review and update as appropriate

### **PROGRAM 3 FACILITIES**

*OCA Update and Review* (§ 68.36)—Update at least every five years or within six months if change doubles or reduces by half distance to endpoint in worst-case scenario

*Process Hazard Analysis* (§ 68.67)—Update at least

every five years or within six months if changes introduce hazards not reflected in current PHA  
*Operating Procedures* (§ 68.69)—Certify annually that procedures are current and accurate  
*Refresher Training* (§ 68.71)—Provide at least every three years, more frequently if necessary  
*Management of Change* (§ 68.75)—Update safety information and operating procedures if changes are not replacement in kind  
*Incident Investigation* (§ 68.81)—Initiate within 48 hours, results maintained for five years  
*Emergency Response Plan* (§ 68.95)—Review and update as appropriate

### **EVENTS THAT TRIGGER REFILE WITH EPA**

- \* Five years after initial filing (§ 68.190 (b) (1))
- \* No later than three years after EPA adds new substance to regulated list (§ 68.190 (b) (2))
- \* No later than the date a threshold quantity amount of a regulated substance is first present in a process (§ 68.190 (b) (3 and 4))
- \* Within six months of a change that requires a revised PHA or Hazard Review (§ 68.190 (b) (5))
- \* Within six months of a change that requires a revised OCA (§ 68.36)
- \* Within six months of a change that alters the program level of any process (§ 68.190 (b) (7))
- \* Within six months of the date that a stationary source is no longer covered (§ 68.190 (c))

## ***Risk Management Program (RMP) vs. OSHA's Process Safety Management (PSM) Program***

The Clean Air Act Amendments of 1990 required facilities using substances known to adversely affect public health or the environment to prevent and reduce the consequences of an accidental chemical release. Under section 304 of the Clean Air Act, OSHA promulgated the Process Safety Management Standard (29 CFR 1910.119) in 1993 to protect workers from accidental chemical releases. To protect the public and environment beyond the regulated facility's property line, US Environmental Protection Agency promulgated the Risk Management Rule (49 CFR 68) in 1996, adopting many of the same prevention measures from the PSM standard for facilities regulated by both rules. Below is a brief overview of the similarities and differences between the two rules.

The Risk Management Rule assigns a program level (Levels 1-3) to a process depending on chemical accident risk to community, type of industry, and

coordination with local emergency responders. RMP requirements for processes assigned to Program Level 3 most closely resemble the PSM standard. Program Level 3 processes must develop a system to ensure employee participation, provide process safety information, evaluate process hazards, provide worker training, manage contractors, review safety prior to process change and startup, guarantee mechanical integrity, issue hot work permits, investigate incidents, plan for emergencies, and conduct safety audits, as required by the PSM standard. Both standards apply to facilities that have regulated substances at or above a listed threshold quantity and exempt flammable substances used as fuel.

Although similar, the rules have several differences. Facilities regulated by RMP are required to develop models analyzing the potential impact of a chemical release on surrounding communities. Unlike RMP, PSM also applies to plants that manufacture explosives or pyrotechnics. PSM exempts flammable liquids stored in atmospheric tanks or transferred kept below their normal boiling point, retail facilities, oil or gas well drilling or servicing, and normally unoccupied remote facilities. The list of substances regulated by PSM and RMP differ. However, the following substances are on both lists:

<b><i>THRESHOLD QUANTITIES</i></b>				<b>CHEMICAL</b>	<b>CAS#</b>	<b>PSM</b>	<b>RMP</b>
<b>CHEMICAL</b>	<b>CAS #</b>	<b>PSM</b>	<b>RMP</b>				
Acetaldehyde	75-07-0	2,500	10,000	Iron, pentacarbonyl-	13463-40-6	250	2,500
Acrolein (2-Propenal)	107-02-8	150	5,000	Isopropylamine	75-31-0	5,000	10,000
Acrylyl Chloride	814-68-6	250	5,000	Methylamine			
Allylamine	107-11-9	1,000	10,000	(PSM—anhydrous)	74-89-5	1,000	10,000
Ammonia, anhydrous	7664-41-7	10,000	10,000	Methyl Chloride	74-87-3	15,000	10,000
Ammonia	7664-41-7	15,000	20,000	Methyl Chloroformate	79-22-1	500	5,000
(PSM>44%, RMP>20%)				Methyl Hydrazine	60-34-4	100	15,000
Arsine (Arsenic Hydride)	7784-42-1	100	1,000	Methyl Isocyanate	624-83-9	250	10,000
Bis (Chloromethyl) Ether	542-88-1	100	1,000	Methyl Mercaptan	74-93-1	5,000	10,000
Boron Trichloride	10294-34-5	2,500	5,000	Methyltrichlorosilane	75-79-6	500	5,000
Boron Trifluoride	7637-07-2	250	5,000	Nickel Carbonyl	13463-39-3	150	1,000
Bromine	7726-95-6	1,500	10,000	Nitric Acid	7697-37-2	500	15,000
Phosgene (Carbonyl Chloride)	75-44-5	100	500	(RMP>80%, PSM>94.5%)			
Chlorine	7782-50-5	1,500	2,500	Nitric Oxide	10102-43-9	250	10,000
Chlorine Dioxide	10049-04-4	1,000	1,000	Oleum (Fuming Sulfuric (Fuming Sulfuric Acid) (PSM 65%-80%)	8014-95-7	1,000	10,000
Chloromethyl Methyl Ether	107-30-2	500	5,000	Peracetic Acid			
Cyanogen	460-19-5	2,500	10,000	(PSM>60%)	79-21-0	1,000	10,000
Cyanogen Chloride	506-77-4	500	10,000	Perchloromethyl Mercaptan	594-42-3	150	10,000
Diborane	19287-45-7	100	2,500	Phosphine	7803-51-2	100	5,000
Dichlorosilane	4109-96-0	2,500	10,000	Phosphorus Oxy-chloride	10025-87-3	1,000	5,000
Dimethyldichlorosilane	75-78-5	1,000	5,000	Phosphorus Trichloride	7719-12-2	1,000	15,000
Dimethylhydrazine, 1,1-Dimethylamine	57-14-7	1,000	15,000	Sulfur Dioxide			
(PSM—anhydrous)	124-40-3	2,500	10,000	(PSM—Liquid, RMP—Anhydrous)	7446-09-5	1,000	5,000
Ethyl Nitrite	109-95-5	5,000	10,000	Sulfur Tetrafluoride	7783-60-0	250	2,500
Ethylamine	75-04-7	7,500	10,000	Sulfur Trioxide	7446-11-9	1,000	10,000
Ethylene Oxide	75-21-8	5,000	10,000	Tetrafluoroethylene	116-14-3	5,000	10,000
Ethyleneimine	151-56-4	1,000	10,000	Tetramethyllead	75-74-1	1,000	10,000
Fluorine	7782-41-4	1,000	1,000	Trichlorosilane	10025-78-2	5,000	10,000
Formaldehyde (Formalin)	50-00-0	1,000	15,000	Trifluorochloroethylene	79-38-9		
Furan	110-00-9	500	5,000				
Hydrochloric Acid, anhydrous	7647-01-0	5,000	5,000				
Hydrochloric Acid (RMP>37%)	7647-01-0	5,000	15,000				
Hydrofluoric Acid (RMP>50%)	7664-39-3	1,000	1,000				
Hydrocyanic Acid (PSM—anhydrous)	74-90-8	1,000	2,500				