



# 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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## Best Practices from the Field

*During RMP training and inspections we meet talented people with innovative ideas. This issue, Lennette Schmidt, Human Resource Manager, National Frozen Foods, in Moses Lake, Washington describes their system for generating participation in their safety committee.*

### Developing a Successful Safety Committee

**Lennette Schmidt, National Frozen Foods**

In looking at our safety committee, the big question was how to boost participation. To address this common problem, we developed tools to help committee members take ownership and instituted the following at our safety committee meetings: Safety Topic of the Month, Safety Incidents, Safety Inspections, Safety Observations, and Safety Suggestion.



#### **Safety Topic of the Month:**

Every month we pick an article to discuss regarding safety. One month it might be about slips and falls because we have a few more incidents in that area. It could be about safe driving because our harvest operation is beginning and we have our fleet of drivers out on the road more. We try to pick something that pertains to our business at the time. At the end of reading the article we open it up for discussion encouraging the safety committee members to participate.

**Safety Incidents:** At each meeting we discuss the previous month's incidents and near misses, working on analyzing the root-cause. The committee then makes recommendations based on the safety incident report and their findings.

**Safety Inspections:** Each safety committee member is assigned an area of our operation to inspect each month. They are given a checklist and are asked to bring it filled out to the safety committee meeting prepared to discuss their observations. We find that inspecting a different area, as opposed to the employees own working area, keeps our minds open and requires the employee to look a little harder.

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## Even Small Plants Can Run an Effective Process Safety Program

*Excerpted and reprinted with permission from Chemical Processing (Jack Chosnek, Improve Safety Despite Limited Resources, Chemical Processing Page 5 of 5, 5/22/2012)*

During tough economic times many companies reduce their head count either by layoffs or by not replacing personnel who have retired or quit. One of the most affected areas is process safety management (PSM).

Although day-to-day application of process safety principles is line management's responsibility, such managers often lack the essential specialized knowledge of the "why" and "how" of some intermittent activities, e.g., process hazard analysis (PHA), safety analysis in management of change (MOC) and incident investigation. A process safety professional who can tie all these elements together is really needed.

### PREVALENT PROBLEMS

The most common deficiencies in process safety affecting small companies (and many others as well) are:

- Deficient or non-existent MOC. This leads to perfunctory safety analyses, overextended temporary changes, etc.
- Inadequate PHAs. Risk identification and evaluation, etc., are poor.
- No refresher training. Although procedures may exist, personnel don't periodically review them.
- Poor process safety information (PSI). Essential details can't be found or are incorrect or out of date.

Another area where all companies seem to be deficient to a certain degree is mechanical integrity (MI), which remains a common underlying cause of many incidents.



Although all aspects of PSM deserve attention, these areas should get priority and constant review. The challenge is doing this effectively when a company lacks adequate expertise and only can provide modest if not meager resources.

### COPING WITH LIMITED RESOURCES

Ensuring smooth operation of a process facility on a daily basis requires at a minimum:

- Operating procedures. The plant can't run unless operators know what to do.
- Trained operators. Operating procedures provide the basis for training.
- Good maintenance. This minimizes outages and maximizes production.
- Safety practices. Preventing incidents and injuries during regular work demands lockout/tagout, hot work permits and other practices.
- Contractor selection. It's important to use only well-trained and safety-conscious contractors.

A good manager will put resources into these areas without question. Other process-safety-related areas may receive less or no attention because they don't seem necessary to the daily running of the plant. So, how do we maximize process safety with minimum resources when a manager is reluctant to hire people to perform the needed activities?

The way to do it is by integrating process safety into operations by making it a line responsibility of the operations manager. The manager will have to become knowledgeable in what's needed to avoid incidents that could injure people or damage the facility. This doesn't mean the manager will have all the technical details on how to implement the process safety program.

A process safety coordinator could provide the expertise and coordinate all the activities — but isn't an absolute necessity. When a permanent position

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### *Even Small Plants Can Run an Effective Process Safety Program*

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isn't viable, a plant still can fulfill the needs of a process safety program on a continuous basis. Let's look at how to accomplish this for key aspects:

**Mechanical integrity.** Many plants are adept at the maintenance component of MI but less so at the inspections component, which requires expertise and continuous application. There are firms that provide this service and also take care of the documentation to satisfy regulatory requirements. For example, use of risk-based inspection can help reduce the resources necessary to maintain a good inspection program. Adding maintenance and testing data to an asset database assists in complying with the required frequency of maintenance, decreases the risk of failure, and can help maintain the integrity of instrumentation vital to safety instrumented systems (SIS).

**Management of change.** This must be well executed to avoid creating or increasing risk to the facility. An effective MOC program requires few resources if implemented correctly and the proper tools are used. These tools should automatically manage the mechanics of the system, including documenting all actions and storing all information, and provide immediate easy-to-understand feedback (such as via graphics), thus allowing site management to concentrate on the quality of the system. It's important to track the number of open and past-due MOCs because they increase the risk to the facility.

**Process hazards analyses.** If a company doesn't have the expertise to perform a PHA, it can hire a facilitator. However, if the PHA is to succeed, the site must ensure an experienced engineer and a veteran operator are given the time to fully participate. Moreover, the plant must immediately address recommendations coming out of the PHA and implement any accepted changes in its work order system. Lingering action items can only increase risk to the facility. This is an area in which, if in-house resources don't suffice, contracting out may be justified. The facility should use the PHA report as a learning tool and check it when doing an MOC to avoid negating a PHA recommendation.

**Process safety information.** The PSI should build on the maintenance files and existing process and instrumentation drawings (P&IDs). To ease keeping the system current long term, the plant

should require good documentation as part of each contracted activity. Updating P&IDs and equipment files usually demands the largest effort to maintain the PSI. The plant also could contract this out if a large number of changes aren't likely. For a site with many changes and limited resources, a document management system could provide the answer—such systems now are within the means of small companies.

**Safety culture.** Establishing a good safety culture should reduce the effort of managing process safety because everybody will have a responsibility for safety. Integrating process safety into operations and having line management accountable for everyday and long-term safety shows that management is "walking the walk" and not just "talking the talk." In addition, a plant should consider expanding occupational safety programs and activities such as "toolbox" meetings to include the topic of process safety.

**Regulations.** A plant should run the PSM system not just to comply with regulations but also to enhance safety in the short and long terms. Implementing a good PSM system will lead to satisfying the regulations but the opposite isn't true. Just complying with regulations may not result in a safe plant. A site should judiciously apply recognized and regularly applied good engineering practices (RAGAGEP).

Finally, a plant also must address other, less frequently occurring process safety aspects such as emergency planning, audits and incident investigation. However, they take much less continuing effort (and, if PSM is successful, there should be no incidents to investigate). The plant also can contract out these parts, eliminating the need for local expertise. Of course, personnel will have to be well trained on the emergency plan and participate in the drills.

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## Best Practices from the Field

### *Developing a Successful Safety Committee*

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**Safety Observations:** Our newest addition to our safety committee meeting is the safety observation. We ask our committee members to review one task per month. They let another employee know that they will be observing them, and at the end of the observation they will have a discussion. We are not looking to punish individuals for doing something wrong, but instead to improve how things can be accomplished safely. After the observations, the committee member asks the employee if they have any concerns about the task they did, or any ideas in how it could be done more efficiently or safely. They then have a discussion, and in many instances, we have changed procedures due to these observations, thus improving our safety environment.

**Safety Suggestions:** We have a couple of safety suggestion boxes that we encourage all employees to put safety suggestions in. If they have an idea that should be implemented they are encouraged to let their supervisor know as soon as possible. All safety suggestions are discussed at each safety committee meeting.

Adding the above tools and activities to our safety committee has resulted in better participation from our safety committee members. Together we are always striving to make National Frozen Foods Corporation a safer place to work.

For More Information on Employee Participation Requirements:

[40 CFR Part 68.83](#)

[General Risk Management Program Guidance, Chapter 7, pg. 7-15](#)



## Plan to attend the FREE EPA Risk Management Training Day in your area

### RISK MANAGEMENT PROGRAM (RMP) Training

**Portland, Oregon: September 11, 2012**

Find details on:

[EPA Region 10's RMP website – Portland Training](#)

### Where Do I Go For More Information?

<http://www.epa.gov/emergencies/rmp> will be updated as new information becomes available.

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 list serve to receive periodic updates:

[https://lists.epa.gov/read/all\\_forums/subscribe?name=callcenter\\_oswer](https://lists.epa.gov/read/all_forums/subscribe?name=callcenter_oswer)

EPA Region 10 RMP Coordinator:  
Javier Morales 206-553-1255

EPA Region 10 RMP Website:  
<http://yosemite.epa.gov/R10/CLEANUP.NSF/sites/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. (800) 424-9346 or TDD (800) 553-7672 (703) 412-9810 or TDD (703) 412-3323 in the Washington, D.C. area

Normal Hours of Operation:  
Monday - Thursday 10:00 a.m.

- 3:00 p.m. Eastern Time

Extended Hours of Operation  
(May, June, and July):

Monday - Friday 9:00 a.m. -

5:00 p.m. Eastern Time

Closed Federal Holidays

<http://www.epa.gov/superfund/contacts/infocenter/>

### **Risk Management Program (RMP) Reporting Center**

The Reporting Center can answer questions about software or installation problems. The RMP Reporting Center is available from 8:00 a.m. to 4:30 p.m., Monday through Friday, for questions on the Risk Management Plan program.

(703) 227-7650 (phone)

[RMPRC@epa.cdx.net](mailto:RMPRC@epa.cdx.net) (e-mail)

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