Process Safety Visions



Enhanced Application and Sharing of Lessons Learned

Enhanced application and sharing of lessons learned means being fully aware of incidents or near-misses and responding in a way that prevents those incidents from occurring again in the same equipment and in similar equipment throughout the company.

Enhanced application and sharing of lessons learned communicates critical knowledge in a focused manner that

satisfies the thirst for learning. This means there is a culture in which employees are driven to learn from many sources, including benchmarking, near-misses, incidents, and jobs done well.

Sorting through near-misses, incidents, and other sources of lessons and deciding which to emphasize is challenging. Companies with great process safety performance have

systems in place to document and respond to these learning opportunities. They do not just share incidents — they respond to the incidents, take action, and learn from the incidents.

What Does It Mean?

- To reduce incidents, everyone needs to continually learn. We learn from accidents, near-misses, industry benchmarking, and success stories.
- First, identify the lessons and recognize the value in sharing them with others.
- Second, use a system to efficiently share lessons, without overwhelming the organization.
- Third, embed the learnings in standards or practices, and check whether existing equipment or processes require modification.

What Is the Value?

- Rapidly sharing lessons drives improvement in company standards and practices and is key to delivering process safety performance.
- Enhanced application and sharing of lessons learned supports both safe and reliable operations.

What Can I Do?

- Use a significant incident or near-miss as an opportunity to encourage and embed learnings.
- Take a personal action or make a change *i.e.*, do something — as a result of learning the lesson. Sharing only makes you feel good; learning makes a difference.

What Does It Look Like?

Reports of major industry incidents serve as a source for critical lessons. Check the U.S. Chemical Safety and Hazard Investigation Board (CSB) website at www.csb.gov. Find an incident that relates to your operations or industry and identify the critical lessons. Then communicate those

> lessons, along with suggested actions, to the appropriate leaders.

Incident and near-miss investigations identify root causes, including human factor and leadership-based root causes. Investigators must understand the difference between a causal factor and a root cause. To effectively apply lessons learned, the lessons must be based on actual root causes. This is fundamental. Correcting only the

causal factors does not prevent future recurrence; one must address the root causes. Use a recognized root-cause analysis technique, and train personnel in its application.

A formal process exists to share lessons learned throughout the company. The best incident investigations and lessons are of marginal use if there is no way to share them with the employees who need to know them. Sending emails to company and site leaders that explain the learning and expected actions is a good way to start. You can formalize this by using standard templates and incorporating requirements for such communications into your vibrant management systems (CEP, Jan. 2017, p. 55). Be careful not to overwhelm people with too many incidents or lessons of minimal value; focus on the most critical incidents and learnings.

Incident investigation status, findings, and action items are regularly discussed at unit production meetings. Operations personnel are usually on the front line in preventing incidents. It is essential that they be aware of and monitor investigation status and findings. Making this a regular item at unit production meetings is not resourceintensive — it requires only that unit management commit to regularly reviewing these topics.

Lessons learned are discussed during hazard analysis **studies.** Most process risk analyses are based on a thorough understanding of what could go wrong. Incident lessons learned are one of the best sources for this information. especially for identifying hidden hazards that unit personnel may not know about. Start such analyses by reviewing the findings of past incidents and incorporating the lessons CEP into the analysis results.