CENTER FOR Hydrogen SAFETY
Connecting a Global Community

Safety Culture Spotlight

Project Schedule Competes with Safety—Training

- Safety takes back seat to Project schedule
- Open and questioning environment undermined by time sensitive schedule
- Management compromise weakens safety culture

BACKGROUND

A facility had a combined Management Of Change (MOC)/Pre-startup Safety Review (PSSR) process (a common practice). This process was managed electronically, routing the MOC package via e-mail to those required. However, the last step called for the PSSR to conduct a face-to-face meeting to ensure the MOC/PSSR process did not become a "review-in-isolation," and provide at least one step of communal brainstorming regarding the change. At the end of the meeting, each participant in the MOC process must sign-off, authorizing the start-up. The procedure specified the MOC Champion, who is assigned in accordance with the procedure, was to monitor and shepherd the MOC from its inception to its completion and chair the meeting.

WHAT HAPPENED

An ongoing project at the facility was several weeks late and there was increasing pressure to finish and get the process restarted. During a PSSR meeting for this project, the Engineering representative expressed doubt about the readiness of operators to run the modified process safely, and advocated additional face to-face training. The engineer also argued that maintenance personnel were not fully briefed on the revised Inspection Testing Preventive Maintenance tasks that will be required.

The other participants disagreed, arguing the training already provided was adequate and the startup should not be delayed. However, this did not make the engineer feel comfortable signing-off, and the meeting was adjourned without final start-up authorization.

Later, the MOC Champion, the Project Manager, and the Operations Manager meet with the engineer's Manager to discuss the engineer's refusal to sign-off. The Project Manager stated forcefully the training requirements were discussed and vetted by several others. He suggested the engineer was simply being argumentative and this was not the first time he had objected, causing delays at the last minute. The Engineering Manager agreed to sign the PSSR in lieu of the engineer.

SAFETY CULTURE FOCUS

- ✓ Strong leadership recognize project safety should not be compromised by schedules.
- ✓ Safety must be an integrated part of all activities and project schedules must include adequate time for reviews and changes that may be needed.
- ✓ The optimum safety culture includes an open, questioning environment to identify potential issues.
- ✓ Mutual trust among workers and management is essential to a successful safety culture.

****Only 63% of those surveyed indicated training was a strength in their organization.****

IMPROVING HYDROGEN SAFETY CULTURE

LEARNING OPPORTUNITIES FROM OTHER'S EXPERIENCES

"Safety culture is how the organization behaves…
…when no one is watching."

Safety Culture Framework

- Safety is everyone's responsibility
- Strong leadership support
- Integrated into all activities
- Open, timely, effective communications
- Questioning/learning environment
- Mutual trust
- Continuous improvement

What are the benefits?

- ✓ Eliminates common weaknesses identified as contributing factors to catastrophic events.
- ✓ Promotes trust in the hydrogen energy industry's ability to deliver safe, reliable, quality products and services.
- ✓ Supports a sustainable legacy for companies and the hydrogen industry.
- ✓ Fosters efficiency and productivity in the workplace.

Resources

- ✓ For further information and resources on safety culture, see: https://www.aiche.org/ccps/safety-culture-what-stake
- ✓ For further case studies on safety culture, see: https://h2tools.org

Keywords: weak, poor, minimum, regulations, flammable, chemical, checklists, compliance