

Actions Speak Louder Than Reporting Chain—Risk Awareness

- Failure of management to support safety testing
- Intolerable risk introduced by management decision
- Management undermines the safety message of the organizational structure

BACKGROUND

The Process Safety Management System (PSMS) Coordinator reported to the Operations Manager. This structure was intended to reinforce the message that all process safety matters were line management responsibilities. In this structure, the PSMS Coordinator served as an advisor to the Operations Manager.

WHAT HAPPENED

Many decisions advocated by the Coordinator were subordinated to production concerns. On several occasions when the Coordinator attempted to include process safety concerns into the decision-making process, he was asked to prove that an unsafe situation existed.

In one case, the Manager decided to skip a scheduled short outage to proof test Safety Instrumented Systems (SIS), among other process safety activities. The Coordinator explained these were SIL2 control loops that required a specific proof testing frequency to provide the expected amount of risk reduction. Failing to test would introduce an intolerable risk because the SISs could not be assumed to have the required level of reliability. Few others in the room understood the technical issues associated with deferring the proof testing of SISs. The concerns of the PSMS Coordinator were summarily dismissed.

It appeared the facility was on the right track by having the PSMS Coordinator report to the Operations Manager. Where did they go wrong?

SAFETY CULTURE FOCUS

- ✓ Safety first—schedules should not take precedent over safety issues.
- ✓ Managements disregard for safety testing undermines the safety culture.
- ✓ Additional risk unnecessarily introduced into the process subverts mutual trust.
- ✓ Management fails to support the purpose of the organizational reporting structure for safety.

****Only 37% of those surveyed indicated management involvement 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>