



Missing The Root Cause—Risk Awareness

- Failure of management to understand the root cause
- Disciplinary actions result in unintended consequences
- Absence of an open, questioning environment

BACKGROUND

An incident investigation resulted in two facility personnel being suspended without pay for two weeks. A year later another investigation also resulted in disciplinary action. Both incidents involved fires that caused significant property damage, lost production, and some minor injuries to facility personnel. The local fire department responded to both incidents, and the media coverage was strongly negative.

WHAT HAPPENED

The Facility Manager stated at a safety meeting that disciplinary actions were the only way to instill a firm sense of accountability. Following these investigations, the level of participation and cooperation in any safety related activity decreased markedly, especially in incident investigations, including near misses.

Why did the participation and cooperation in safety efforts, especially incident investigations, drop off? Do you think the facility found and corrected root causes of incidents?

SAFETY CULTURE FOCUS

- Management focused on individual failures rather than the weaknesses of the safety culture that contributed to the failures leading to the incidents.
- ✓ Disciplinary actions reduced mutual trust and cooperation within the organization undermining communications and the ability to determine the root causes.
- Managements corrective actions sabotaged the opportunity for open dialogue with workers and continuous improvement of the safety culture and worker performance.

Only 46% of those surveyed indicated employee involvement was a strength in their organization.

IMPROVING HYDROGEN SAFETY CULTURE

LEARNING OPPORTUNITIES FROM OTHER'S EXPERIENCES

This record is taken from "Essential Practices for Creating, Strengthening, and Sustaining Process Safety Culture," CCPS, ©2018, AIChE and John Wiley & Sons, Ltd.

"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