Using digitalisation to support leadership in delivering more effective process safety management

In a recent survey [1], 65% of respondents acknowledged a gap between their company's process safety goals and the reality of what they were achieving. For those operating in and around the hazardous process industries this is particularly concerning.

The main challenges cited were as follows:

- 46% thought training and competency challenges were ever present
- 32% said being able to engage front line staff to improve awareness was a problem
- 38% stated maintaining management involvement was a major challenge

A lack of training coupled with difficulties in engaging front line staff, suggests there are real issues in people management and education – if those who carry out routine maintenance and production have gaps in their capabilities and understanding, this is bound to have an impact on meeting process safety goals.

Leadership in process safety is known to drive the right culture
Leadership in process safety (PSL) - maintaining management involvement is currently seen as an issue for nearly 40% of respondents - plays a crucial role in cultivating a robust safety culture to drive improvement. PSL necessitates the commitment and accountability of leaders and senior management to make process safety a fundamental value and strategic priority. This involves setting clear expectations, allocating sufficient resources and effective communication.

For some years now, PSL training has been available with the aim of equipping managers with the knowledge, skills, and mindset necessary to effectively lead and manage process safety within an organisation. Leaders must understand how to balance the ask between protection and production[2] to ensure that underlying factors such as organisational culture, resource limitations, communication breakdown or equipment failures are adequately addressed so as not to contribute to potential major accidents. However, shorter term issues such as we have seen recently with rising energy prices, rising employment costs and the wider impacts of Brexit, may be tilting the balance.

This has not gone unnoticed, and the competent authorities remain focused on driving major hazard leadership, looking for leaders to demonstrate the following:

- **Leadership and Accountability:** Senior leaders must actively promote major hazard safety, with clear accountability outlined in job descriptions and performance agreements. They should align practices with corporate policies, regularly assess their leadership behaviours, and maintain a sense of vulnerability to prevent complacency.
- **Integration of Safety:** Safety should remain the top priority, integrated into commercial decisions, and considered alongside other business threats. Budget allocation should be based on site conditions and past performance, with major hazard considerations incorporated into investments, planning, and mergers/acquisitions.
- **Board Level Competence:** Effective Board level competence requires a dedicated senior leader responsible for major hazard risks, possessing the necessary skills and receiving specific training. Leaders should deeply understand major hazard risks, anticipate long-term consequences, and may take on operational roles temporarily to enhance their proficiency.
- **Monitoring and Improvement:** Regular monitoring of major hazard performance using key indicators, audits, inspections, and feedback. They should assess the effectiveness of systems, seek out weaknesses in plant, processes, procedures, and people, and utilise metrics to track safety culture and plant/equipment health. Continuous improvement is a priority.
- **Transparency and Knowledge Sharing:** Performance information should be published and communicated within and outside the organisation, demonstrating a commitment to transparency and accountability. Senior leaders should actively engage with industry peers, encourage information sharing, and ensure that learnings from incidents and benchmarking exercises lead to tangible changes in major hazard control, fostering a culture of continuous improvement and safety vigilance.

Digitalisation can help businesses transform their approach.
Without a unifying system, this information is more likely to sit in silos or inaccessible places, not easily viewed in the round. Equally it means that employees may only have partial understanding of the status quo, which makes it very difficult to be sure all issues are dealt with effectively. Leaders should be championing digitalisation within their businesses to ensure that there is full visibility on all core data, to foster engagement throughout and accountability across the board.

Our software, OpenPSM, seeks to help businesses make this transformation using structured and systematic processes built on best practice guidance. At any given time, it provides a live snapshot of key risk controls, strengths and weaknesses, and actions for improvement that can be managed using an integrated action management and reporting system.

A built-in maturity model, linked to recognised guidance, ensures PSM systems and programmes continually evolve and improve, to provide ever-more effective control over major accident hazards, and a sound basis for benchmarking and reporting on key ESG and Responsible Care issues for your business.

For more information, visit https://openpsm.uk/
Fiona Hought, Marketing Director - OpenPSM

[1] Research by Sphera November 2023
[2] Reason, J., 1977, Managing the Risks of Organizational Accidents, Ashgate.