

GREY PAPER

insights



The mission critical role of leadership in increasing control of Operational and EHS Risk.



Pilko & Associates Grey Paper

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INTRODUCTION

Leadership plays a significant role in controlling Operational and EHS Risk. Great leadership creates the right environment for employees and contractors to do their very best work while encouraging them to speak up regarding issues and risks they see that require attention.

Great leadership also helps organizations see risk differently than in the past, creating better outcomes for the future. The role of every leader, at all levels and times, is to “Challenge the Green and Support the Red” through encouraging employees and contractors to highlight, prioritize and control real issues and risks. The very best leaders see their role as developing the next generation of great leaders.

Leadership is critical at all levels in the organization to significantly contribute to enterprise and site performance and gaining control of risk.

WHAT LEADERS SEE THAT OTHERS DON'T

Improving control of Operational/EHS Risks requires an understanding of how “risk” is defined: *as a situation involving exposure to danger, harm or loss.*

In the energy and chemical industries, many companies operationalize that definition by looking at probability and consequences to:

- Understand and predict the probability of an event or incident
- Quantify the actual and potential consequences from that event or incident

Organizational and site leaders have history in how they perceive risk based on what they have personally experienced or heard from others. Similarly, historical incidents such as fires, unplanned unit shutdowns, power failures, etc., affect how an organization defines risk.

And, the consensus is that an incident is highly likely to reoccur again once it has happened at a site. Alternatively, if a site has not experienced a particular incident, people perceive the probability of one occurring to be lower. Despite these preconceptions, experienced leaders know that other circumstances beyond past occurrence affect probability.

UNDERSTANDING PROBABILITY

The best leaders take time to fully understand how events and actions align to create a higher or lower probability than people may perceive. Leaders ask, “What if Barrier 1 fails?” or, “How about if Barriers 1, 2 and 3 all fail?”

Significant incidents are rarely caused by a single failure or action. Almost always, incidents occur when events or outcomes don't line up or go as planned.

Think of the interaction of light and two polarizing filters or lenses. Arranged one way, no light can penetrate. When aligned differently, however, light easily penetrates the filters. Risk works in a similar fashion. Often a site believes it has mitigated a particular risk (by aligning processes and people the correct way); but, without periodic challenge to ensure those mitigations are still in place and effective, the organization has a false sense of security. Without proper alignment, risk is actually increased because people believe “That can't happen here.”

Leaders ask questions that organizations need to answer in order to help people recognize that controlling risk must be done continuously. Leaders help the organization learn to question barrier effectiveness. For example:

Refinery A has never had a floating tank roof sink, an incident that occurs periodically in the oil industry. The site may have had multiple barriers in place, including opening roof drains during rain events and ensuring drains were not plugged and checking all of the floating roofs after the rain. Over time, operators responsible for maintaining established barriers were assigned additional responsibilities and were unable to

complete required checks to fully mitigate the known risk. To make matters worse and drive risk even higher, new operators did not understand the importance of maintaining the barriers—they had never experienced a sinking roof—so to them, the probability of such an event was low.

As a result of a rainstorm event, Barrier 1 fails (some of the roof drains were plugged up) which allowed water to pool on the roof. Barrier 2 fails because operators did not check the roof after the rain. The outcome is the higher risk of a roof sinking and, eventually, a sunk roof incident.

Leaders in this example needed to ask more questions about how robust the barriers were to ensure that floating roofs would not sink; however, since it had never happened at the site, those questions went unasked.

A critical obligation of energy and chemical leaders is to understand, prioritize and manage probabilities irrespective of past history. Doing so ensures the correct questions are asked and risk mitigated.

ACTUAL VS. POTENTIAL CONSEQUENCES

Experienced leaders know to fully recognize risk. What may be missing is an understanding of potential and actual consequences. Many times, organizations or sites are simply lucky in that the impact or consequence of an incident or event was minimal as compared to what might have been.

People tend to believe that because an event outcome was not catastrophic, the risk is low. This reasoning is flawed.

To fully understand the magnitude of risk, both actual and potential consequences must be considered. Otherwise, risks will be underrated and not properly mitigated.

LEADERSHIP TRANSPARENCY

Controlling risk requires transparency. Leaders must share personal experiences from other sites to help others recognize and control risk. Each leader brings different, multi-site perspectives on probability and consequences as a result of having lived through events.

Transparency enhances risk assessment processes so that leaders learn from others. Third-party “cold-eye reviews,” networking with peers; and review of Chemical Safety Board (CSB) findings on incidents bring new insight, understanding of probability and consequence and methods for increasing control of Operational/EHS Risk.

Thus, leaders must establish transparency within their organizations, and set the expectation that everyone will learn from the experiences of others in order to control risk.

CHANGE INCREASES RISK

Leaders know that change increases risk within an organization and a site. Increased performance expectations drive engineers and operators to develop improvements to operating processes. Recognizing the importance of continuous improvement, leaders must also understand that change and improvement projects introduce new defects and unrecognized operating scenarios.

During change, recognizing a new risk is often difficult. As new operations and improvement projects are implemented, the Process Hazard Assessment (PHA) process must be robustly followed, utilizing experienced people. The review team must be given adequate time to think of different operating scenarios created by an improvement. Never underestimate the time and focus needed by an organization when focusing on risk issues.

As a result, many sites would rather have fewer changes, reviewed in more depth, versus many changes with an assumption of little or no risk impact.

BECOMING A BETTER LEADER

What do best-in-class leaders do to better increase risk control in their organizations or sites?

1. Disrupt the status quo. Keep asking questions and have discussions that challenge understanding of Operational/EHS Risk, in terms of probability and potential or actual consequences.
2. Change the culture. Set an expectation that an organization or site will ask tough questions and take appropriate actions to mitigate risk.
3. Be transparent. Share experiences and learn from others—don't make the same mistake twice.
4. Change wisely. Manage the quantity and type of change and always ensure robust reviews of change impacts across the organization or site.

Energy and chemical leaders have consistently relied on Pilko & Associates to increase and accelerate achievement of control of Operational/EHS Risk. These leaders have depended upon the experience, skill, proven Best Practices and **8IGHT DRIVERS**[®] methodology to find, prioritize and eliminate "hard" and "soft" risks within their organizations and companies.

Would it be valuable to have the ability to see and mitigate the next incident before it happens? Is it possible to get beyond known, easy-to-measure risks, to control hidden or "soft" risks that endanger balance sheets and reputations?

Pilko & Associates' clients agree that achieving these outcomes carries great value.

Your next unplanned incident may just be around the corner, so put the Pilko team to work in your organization - helping leaders become more aware of how to recognize risks within their organizations and sites!

GETTING STARTED ON BETTER LEADERSHIP

Great leaders continually seek new perspective, Best Practices and advice in areas of importance. Great leaders never rest on the past or become complacent with the current state of organizations, activities and methods for increasing control of Operational/EHS Risk.

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ABOUT PILKO & ASSOCIATES

Pilko & Associates provides industry-focused advisory services in three core areas—Transactions, Operational Excellence and Governance & Assurance—to enhance value for our clients and their stakeholders in the chemical and energy sectors. We deliver innovative solutions for publicly and privately-held companies, helping them to identify, understand and manage their Operational Risk and Environmental, Health & Safety needs. For more information, visit www.pilko.com.

