AVOIDING CATASTROPHIC INCIDENTS DURING INDUSTRY DOWNTURNS

by George Pilko

Serious incidents in the energy industry are always newsworthy. Yet it's the near-misses – which often don't attract attention from the media – that can be the most frightening to insiders.

As our advisors talk with heads of operation in both the upstream and downstream sectors, we often hear sobering stories of near-catastrophes – such as a massive vapor cloud that didn't ignite – that would have been front-page stories in national media for days, weeks or even months. These "what could have been" events should keep energy executives and board members awake at night.

Mitigating Catastrophic Risks (See October, 2015 Grey Paper on this topic) is challenging enough during normal economic conditions. The size of the challenge increases significantly when energy prices collapse. During a downturn like the one we are currently experiencing, the probability of a catastrophic event is impacted by a variety of factors:

- **Financial Stress —** At Pilko & Associates' New York Transactions Roundtable in September 2014, many participants expressed concern that world crude prices might continue to decline; but no one expected sub-$40 oil. The industry was caught by surprise and continues to scramble to adjust to the potential of "Lower for Longer" prices.

  The current focus at many companies is on slashing capital expenditures, reducing staffing levels and trimming budgets. What impact will these adjustments have on future catastrophic incidents? The answer to this question will depend upon how intelligently each company manages Operational/EHS Risks throughout this downturn.

  A savvy Operating Executive reminds us that "Draconian cuts are negatively received and you need to be mindful of when employees stop caring because they think management no longer cares about reliability and safety."

- **Corporate Mergers —** Mergers of all sizes will likely be a byproduct of the current financial stress. Some mergers result in Operational/EHS Risks being effectively managed at the combined company (think Exxon and Mobil); in other cases, these issues have been less than brilliantly managed.

  Typically, large management consulting firms are hired to assist with transition planning/post-closing integration on major mergers. The problem is that these firms lack a fundamental understanding of the importance and difficulty of managing Operational/EHS Risks throughout complex energy companies in order to minimize the probability of catastrophic incidents.

- **Stretched Operating Staffs —** Many companies have large capital projects under way, some of which are scheduled for startup within one to three years. These new facilities will stretch these companies' human resources in operations, technical and staff support roles. Think about it like this: If a new operator needs five years to be fully trained, and the average experience level at a facility is less than five years, the situation is fraught with potential danger.

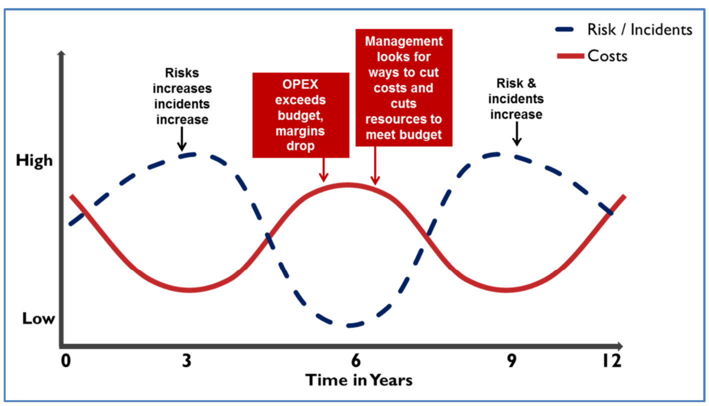
- **Layoffs —** Financial pressures during a downturn often lead to staff reductions. The challenge is managing these staff reductions in a manner that allows the organization to effectively mitigate risks. Management of Change processes can be invaluable before, during and after staff reductions – but these processes are often ignored; done superficially; or started too late.

- **Loss of Experienced Veterans / Competency —** The industry dramatically expanded employment during the 1970s after the two oil embargoes. Now, after years of service, these Baby Boomers are retiring, and these retirements will be hastened by the current downturn. Unfortunately, their replacements – in roles as diverse as operators, plant managers, support staff and corporate officers – often don't have the experience of managing during downturns and are apt to make less-than-wise decisions regarding risk management. When training budgets are slashed and staff is reduced, serious gaps in competency can result which are compounded by breakdowns in internal communications and the inability to recognize or remedy complex, risk related technical and asset issues.

- **Aging Assets —** The industry has assets that are approaching or are beyond their anticipated service life, requiring a managed approach to life extension to ensure continued levels of safety and asset integrity. While older assets can be operated safely, they are subject to corrosion and degradation which can easily be overlooked. Fortunately, systematic approaches are available to effectively extend the life of aging assets and hence mitigate the risk exposure.

If a given company is forced to deal with only one of the factors above, the challenge can be manageable. Most companies in the industry, however, are wrestling with multiple issues simultaneously, making the situation infinitely more complex.

Sam Preckett, a Pilko & Associates' senior advisor, did a detailed analysis covering a 12-year period for a major energy company. No surprise — his study showed a clear relationship between reductions in headcount/budgets and major incidents.



To keep from inadvertently increasing the probability of a catastrophic incident, companies need to avoid being "penny wise and pound foolish" when reducing maintenance, staff, and training budgets.

Top-down budget cuts, made without meaningful inputs from operating personnel who understand how potential reductions can impact Operational/EHS Risks, may result in unnecessary and very expensive surprises.

As we speak with a broad range of clients—refining companies in Asia Pacific, petrochemical companies in the Middle East, or midstream companies in North America—their corporate officers often point to their management systems and audit processes as their primary defenses against catastrophic incidents. Unfortunately, these defenses often provide false security.

For instance:

- Major disconnects between headquarters and the field are common. What matters is the reality of what occurs at 2 a.m. on a Saturday morning when facility management is not present. Too frequently, this reality is far different than the expectations of the corporate office.

- Audits simply are not effective at mitigating risk. Boards and EHS organizations rely on their auditing processes for insights into how an organization is functioning. When we speak candidly with COOs and heads of operations, they have little confidence that their auditing efforts are providing them meaningful insights that allow them to mitigate their risks effectively.

- Most companies are overly focused on compliance with internal management systems/policies and regulatory requirements. Instead, **they should be identifying, prioritizing and aggressively mitigating Operational/EHS Risks.**

This false security is commonly caused by Blind Spots which, by definition, are not visible to the board, corporate officers and line management. Decisions made by one part of an organization can easily have unintended consequences in other areas. At a time when holistic thinking is essential, silo thinking is often the reality. Accordingly, a Cold Eyes Review by an independent third party can be invaluable in identifying and dealing with Blind Spots (see 8IGHT DRIVERS® Grey Paper).

The bottom line is clear. Individual companies – and the industry as a whole – are under stress from multiple directions in the current economic climate; and the potential for game-changing catastrophic incidents has never been higher. During a time when Operational/EHS Risks are rising due to external factors, companies must not lose sight of the importance of aggressively managing and mitigating Operational/EHS Risks. And company leadership – from the board room to the C-suite – must ensure that the resources remain in-place to adequately address these risks.

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