Sipchem Heightens Accountability by Implementing Process Safety Improvements for Operational Excellence

Sipchem is a globally recognized chemical manufacturer in Saudi Arabia that sells more than 2.4 million tons of petrochemicals with revenues surpassing SR 4 Billion in 2014. Since its founding in 1999, Sipchem has been on the cutting edge of advances among chemical companies in Saudi Arabia, differentiating itself through its use of advanced technology and its concern for safety and environmental responsibility.

Sipchem continually works to follow international standards and improve processes surrounding safety, health, the environment and security. In 2011, it became the first chemical manufacturing company in the Kingdom of Saudi Arabia to achieve the prestigious Responsible Care® certification. Responsible Care is the chemical industry’s global initiative to drive continuous improvement and achieve excellence in environmental, health, safety, and security performance of products and processes.

As part of its commitment to safe, clean, energy-efficient operations, Sipchem has long looked to Sphera for help in developing process safety methodologies and getting their staff up to speed on them. Since 2005, Sipchem has been using Sphera’s Stature for Risk Assessment to assess operational risk around its process safety procedures, pinpointing problems, diagnosing their cause, and evaluating solutions. Using Stature, Sipchem has been able to document necessary modifications to its safety procedures much more quickly and thoroughly.

By 2011, the company was looking to take the next step. It wanted to adhere to industry best practices by implementing a new Management of Change (MOC) solution to improve its ability to ensure that the recommended changes were completed and implemented properly. “We wanted to meet the requirements for Responsible Care while achieving a higher level of efficiency,” said Nedhal Al Keoshi, Senior Corporate Quality Coordinator for Sipchem.

The company addressed this issue with the help of the Sphera Management of Change (MOC) solution.

Improving Safety Process Workflows

Previously, Sipchem had used several simple workflow systems to manage change. While these solutions could manage basic workflows, they were not designed by plant safety experts and lacked the sophistication to handle the change management processes and sub-processes necessary for chemical plants. The systems, moreover, lacked the configurability that would have enabled Sipchem to modify workflows themselves to better suit their needs. Nor did the vendors have the process safety expertise to properly implement changes for them.

CHALLENGE
- Comply with safety, health, environment and safety standards to achieve certifications
- Improve efficiency and effectiveness of processes regarding safety, health, environment and safety
- Adhere to best practices by implementing a change management solution

SOLUTION
Operational Risk
- Management of Change
- Risk Assessment

RESULTS
- Ensured accountability – safety team follows discrete, auditable processes to guarantee that safety process changes are made properly
- Automated adherence to best practices that come out of safety studies
- Improved safety process efficiency and consistency
- Helped safeguard against safety disasters
With Stature for MOC, Sipchem now has a solution developed with a deep understanding of its business pains. If modifications are necessary, the system’s configurability makes it easy for Sipchem to accommodate them without significant customization. As it grows and changes, Sipchem can easily add new users simply by entering their name and security role.

The system’s ease of use makes it easier for Sipchem to ensure that users take advantage of the solution. Said Al Keoshi, “The system is very elegant and easy to use while still covering our safety needs. It has been very easy to introduce the tool to people even if they haven’t used anything like it before. We simply conduct awareness and training sessions. Although there’s a lot of material, it’s all very clear. Included flow charts help explain the new procedures. Sphera continues to help us with optimization, technical support and training.”

Ensuring Complete Accountability

For Sipchem, the biggest benefit of using Stature to manage MOCs has been accountability. Stature allows Sipchem to identify and track all of the risks associated with their MOCs and ensure that the safety team follows discreet, auditable processes to make the necessary changes.

In particular, the risk assessment process typically generates a large number of actions that must be taken to remediate issues. Each of these actions may include complex sub-workflows and sub-actions. If the company were to complete these processes using email or other manual processes, they’d have to go through considerable back and forth activity to track where each step was in the process and ensure it was completed. Now, automated workflows control critical MOC or facility change request processes. If someone fails to take an action at the required time, it’s easy to determine where it is in the process and escalate that action to guarantee completion.

Sipchem’s earlier MOC systems were unable to provide the requisite level of control. As Al Keoshi noted, “When the MOC system was managing facility change requests and MOCs, there were gaps in closing out issues. That made it easy for users to misuse the tool and say that steps were completed when in fact they were not. It wasn’t obvious to the system administrator whether an action had been completed or closed out effectively. And there was no way to follow up.”

Sipchem can now also take advantage of auditing capabilities to prove both to itself and to auditors that it has done everything necessary to keep its plants safe. With this information, all levels of management have a much better picture of how well the company is managing change throughout the organization.

Ensuring that changes are completed properly can literally be a matter of life and death. “We’re able to make sure our safety team completes all of the necessary steps to implement a change using Stature for MOC. Without a system like this, tasks might not be completed and the result could be a safety disaster,” said Al Keoshi.

Strengthening Adherence to Best Practices

Sipchem has been able to bake best practices into workflows using Stature for Risk Assessment and MOC. As safety staff perform risk assessment studies or MOCs, Stature incorporates lessons learned. Whenever the safety team subsequently performs the process, previous experience informs the workflow. The solution automatically guides users in their decision making to consider various possible causes, consequences or potential safeguards based on these best practices.

Driving Efficiency and Consistency

Using Stature MOC, Sipchem not only ensures and expedites completion of change management, they also improve consistency in the way people perform change processes across the company’s nine plants. “We can now document our studies faster, more thoroughly and with greater consistency throughout our operations,” said Al Keoshi.

Building on a Trusted Partnership

In the future, Sipchem plans to continue to improve its safety operations. Said Al Keoshi, “Our goal is to achieve excellence throughout our operations so we can produce high quality and safe products that don’t harm the environment. Sphera has been — and will continue to be — a trusted partner in helping us achieve our objectives.”

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