Deep dive audit

Jotun Paints, in the UK provides protective coatings for the offshore and industrial sectors, marine coatings, cathodic protection, and decorative paints. Jotun identified the need for an independent view of PSM at their Flixborough plant. They wanted assurance that:

- Their assets were being managed appropriately in the context of the process safety risks on site.
- They had appropriate process safety competency and resources
- They understood and had documented their process safety risks on site

They did not want to be told what they already knew; they wanted to identify any blind spots, establish priorities for action and get some guidance of what needs to be done to rectify any gaps to ensure they met the requirements of regulatory authorities.

ABB carried out a deep dive audit to make an assessment of the PSM system in place to ensure it was appropriate for the risks on site.

We were selected as we have the capability to not only look at process safety management from a process safety perspective, but also from an integrity management perspective to provide a holistic view.

Solution

We used the ABB deep dive audit methodology, which gives a rapid assessment of the PSM system with limited preparation from the customer, to establish answers to following key questions:

- Are the key process safety risks on site understood and documented?
- Does the site have the appropriate process safety competence and understanding to manage them?
- Is management taking the right action to control and reduce process risk?
- Are the assets of the facility being appropriately managed in the context of the corresponding process safety risks?

This was achieved by firstly carrying out visual overview inspections of the site. Then a number of significant hazard scenarios were identified and an assessment carried out to ensure the safeguards installed were effective, in place and maintained correctly. The hazard scenarios selected covered a wide range of safeguards to give a complete view. We used a collaborative approach in the assessment of the safeguards to ensure that learning was passed onto the site team.
We also organised structured discussions with site personnel from safety, engineering and technical functions with responsibilities to deliver parts of the PSM system. We used our practical experience to set the agenda for structured discussions and identify issues that required deeper discussion and site investigation.

The safeguard assessment and discussions established a baseline of where the site was against the elements of a process safety management system.

Throughout the project we worked in an open manner, addressing issues as they came up. This allowed for a final feedback session that had “no surprises”. Enabling it to be a more of an interactive discussion on what needed to be done, rather than just what was wrong, to give the site a roadmap for improvement.

**Benefits**
- Reduced risk of incidents through a prioritised set of practical recommendations to improve the PSM system, giving the basis of a roadmap for improvement
- Reduced risk of loss of production by taking a holistic view of PSM on site from both integrity management and process safety perspectives
- Compliance with regulations and recognised good practice
- Assistance in meeting future COMAH report requirements through the identification of issues which need to be addressed in the review and revision of the report
- Improved personnel awareness of potential safety risk on site