OIL AND GAS CASE STUDY - INTERNATIONAL OIL REFINERY, SOUTH KOREA

HSE management system

Developing a Health, Safety and Environment (HSE) management system.

Cost pressures are driving organisations to become even leaner and more efficient. Ever-present regulatory pressures, the growing trend toward self-certification, and emerging international standards HSE management systems are also necessitating organisational change.

An international oil refinery based in South Korea underwent an insurance assessment, one finding was that their arrangements for safety management needed to be reviewed. Our reputation led the client to contact ABB for help.

The key challenge was to get buy-in from the whole of the refinery team. ABB helped to guide senior management through the development and implementation of their improved health, safety and environmental management procedures.
Solution

ABB’s expertise in helping clients to adapt and develop their own HSE management systems are recognised by both national regulatory bodies and operating organisations. Our HSE management system framework is based on the ‘virtuous circle’ shown overleaf. The HSE policy of senior management is cascaded through the organisation by management standards, guides and local instructions. The operating unit responds by auditing compliance which provides the basis for their letter of assurance back to senior management.

The approach taken for this project was to focus on three key factors in managing health, safety and environmental risks:

- Clear leadership from senior management
- A systematic and structured HSE framework
- Practical customised local implementation of appropriate systems and procedures

Leadership

Commitment from the top was vital in encouraging active participation by all staff in the subsequent customisation process. To begin to generate this commitment the team coached the refinery’s senior management in the underlying concepts of ABB’s HSE management system.

The HSE management framework

ABB HSE management framework is supported by a range of model procedures which can be tailored to meet specific client needs / standards. To ensure that the framework best meets client’s needs the process is customised for each client. This process was adopted with our client as described below:

Customising process

Two small teams of technical staff were allocated from different departments to prepare and recommend new drafts based on ABB’s model procedures and guidance. This began with allocating responsibilities for the studying of each procedure to the teams, and to prioritise the order in which they would be addressed. Next, the teams translated each of the procedures into their native language.

Teams gathered information from across the range of operating and support departments throughout the refinery, including identifying existing procedures. If any were equivalent, they were compared and contrasted with ABB’s relevant model procedures.

Armed with this information, the team initiated discussions involving the relevant managers, to agree where improvements could be made. Where no equivalent procedures existed, the teams developed new procedures, and then introduced them to the management and the operating staff.

The inevitable debate and counter proposals about each procedure was itself a vehicle for adjusting attitudes to safety. In the final phase, our client trained all refinery staff in those procedures relevant to them.

Benefits

- Safety compliance
  • ABB ensured the client met all the criteria for full compliance required by their insurers
- Effective management
  • The client implemented a HSE management system which is appropriate for his business
- Raising awareness
  • We also helped to raise client awareness of health, safety and environmental issues; minimising the potential for incidents