Fuel storage site safety

Comply with relevant good practice for safe storage of fuel.

Following the Buncefield accident in 2005 and subsequent investigations into the explosion and fires, the Process Safety Leadership Group (PSLG) issued the final report on standards for fuel storage sites in December 2009.

The report defines best practice for the safe storage of fuel and this is set to become the de facto standard for storage installations. The recommendations are wide ranging, covering equipment design, engineering procedures, safety management systems, culture and leadership. Implementing them requires specialist knowledge in a number of areas of safety and integrity.

In the UK fuel storage companies are coming under increasing pressure from the HSE to demonstrate that relevant good practice is being followed.

The best practice standards include the following areas:

- SIL assessment and SIL lifecycle management
- Tank capacity and response times
- Remotely Operated Shut-off Valves (ROSOV)
- Overflow detection
- DSEAR risk assessments
- Tank and bund design and inspections
- Firewater management, including tertiary containment
- Organisational reliability (Human factors)
- Incident and near miss investigations
- Active monitoring using PSPI’s
- Safety culture and leadership

The prime focus is on fuel storage, but the best practice also applies to any facility storing liquids with the potential to form a large vapour cloud, (e.g. benzene, NGLs etc.). In the UK the HSE requires a gap analysis, versus best practice, to be completed by the end of quarter 2 2010. An action plan for improvements is then needed by the end of quarter 3.

What we offer
ABB has a strong track record of providing services in each of the areas identified in the Buncefield report. We have developed an overall fuel storage assessment protocol that identifies gaps across the whole storage system.

ABB can also help in developing and implementing gap closure plans that reflect site priorities and reduce risks to acceptable levels.
The services we can offer to improve the safety of fuel storage facilities include:

- An assessment of the overall safety of the facility against best practice
- Assessments against best practice in each individual technical area of concern
- Help in developing and implementing appropriate solutions that will close any gaps that exist

**Benefits**
Companies utilising ABB specialists will benefit from:

- Reducing the risk of accidents or incidents
- Assurance that best practice in fuel storage is being followed
- Using proven approaches to assessing and improving fuel storage safety
- The efficient use of busy operations and technical staff
- Accessing pragmatic guidance on relevant good practice
- A targeted improvement plan to reduce risks

**Why ABB?**
ABB has experienced consultants across all of the specialist areas of concern to fuel storage safety. Many of our consultants have been involved in developing the standards.

Some key strengths of ours that offer value to you include:

- We cover all the necessary areas - risk assessment, procedural, engineering, behavioural - which is unusual
- We have a pragmatic approach based on our operational heritage
- We can support you from gap identification to full implementation of action plans.
- Our track record of delivering improvement in all areas of safety and integrity management