



Safe Storage of Fuel

The Process Safety Leadership Group in the UK has issued its final report. This details new safety and environmental guidance for fuel storage in response to the Buncefield Major Incident Investigation Board's report. **All operators must “take all necessary measures”.**

The Problem

Buncefield showed that explosion hazards presented by fuel storage are much greater than previously envisaged. Storage operators should therefore once more explore their means for preventing, detecting, controlling and mitigating the effects of major hazards.

Critical issues

Key issues for consideration, arising from the report, are listed below. *The HSE in the UK expects UK operators to have completed a gap analysis and prepare an action plan within 2010.*

Do you know the gaps in your organization?

Is your organization Buncefield proof?

Primary Containment

- Design Review
- Tank Integrity with Written Scheme of Examination
- Automatic Overfill Protection and fire-rated ROISOVs

Secondary Containment

- Bund Integrity and capacity
- Upgrading of linings and joints
- Overtopping
- Fire detection and protection measures

Tertiary Containment

- Environmental Impact Assessment
- Fire water management
- On – site containment to protect the environment

Safety management Systems

- Performance indicators (PSPIs)
- Communication, competence, control, co-operation
- Management of fuel transfers
- Identification of Safety Critical Elements
- Audit and review procedures
- Incident Preparedness and Operational Continuity

Approach and Solutions

To enable a consistent and coherent approach, it is critical operators develop a strategy for the implementation of the new guidance. The guidance encompasses many interacting principles of safety engineering and management. To comply, DNV advocates a systems oriented, risk-based approach. This implies implementing cost effective solutions using the most appropriate tools, enhancing the existing management systems structure.

As we have a balanced skill-set encompassing the technical risk, asset integrity and systems aspects of operational management, we are in a unique position to assist in determining the level of performance of a site in compliance with the guidance requirements. Our proven gap analysis, and planning tools, as well as our strong regulator relationships ensure we can assist in developing realistic plans to improve performance where needed.

Benefits of Using DNV

- DNV is a recognised leader in the field of major hazard management from a technical, operational and management systems viewpoint.
- DNV has a class leading track-record in successfully delivering accessible SEVESO safety reports for the oil and gas storage, refining and petrochemical industry.
- DNV has the perspective and expertise to employ a holistic approach to improving risk management, thus delivering pragmatic and cost effective solutions.
- DNV looks beyond technical analysis and ‘compliance’ to assist on improving Incident Preparedness and Operational Continuity Management

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MANAGING RISK

