



Learnings from Major Incidents - 2006



Objectives

- Reduce the potential for future incidents by understanding and addressing identifiable system, leadership and cultural issues that have contributed to past incidents
- Identify common themes and root causes to major incidents
- Develop recommendations focused on reducing the potential for similar incidents
- Communicate key findings from major incidents throughout the enterprise



In-Scope

- Incidents that occurred April 1, 2005 – Sept 30, 2006
 - Serious incidents resulting in, or having the potential for fatalities
 - Fires & explosions > \$500,000 direct loss
 - DAFW injuries (top DAFW incidents – based on severity and total days away from work)*
 - Near misses with potential for major consequences*
 - Reliability incidents (Cost of Incident (COI) > \$10MM or other incidents that were a result of a reliability issue or failure)*
 - Incidents with wide scale negative impact to reputation*
 - Environmental incidents for which the consequences are a sub-set of one of the in scope incidents*

* Indicates items new in scope versus 2005 study

Out of scope

- Motor Vehicle Crashes
- Acts of Violence
- Incidents in non-operated joint venture facilities



Study Process Steps

- SiteSafe was our initial data source
- Using the criteria we identified incidents for further study
- Obtained detailed investigation reports from SBUs, analyzed them for common themes and cultural issues
- Developed findings based on the review of incidents and the experience of the team
- Incorporated an external reviewer for benchmarking and learning
- Developed conclusions based on the findings



Key Findings

- **Procedures and Safe Work Practices (SWP):** Job oversight, not understanding the risk, not following the procedure, lack of auditing to ensure following, and acceptance of deviations are the key root causes.
- **Risk Assessments:** Less than adequate JSAs and snap decisions by individuals played the key role in all but one of these. The term “snap decision” as used in this study is defined as a quick decision that violated tenets or was made without understanding or assessing the risk.
- **Supervision/Oversight:** Inadequate supervision at the work site played a key role.

Leadership Accountability Conclusions

Based on the findings of the study four key areas of Leadership Accountability need to be strengthened:

- Expectations and accountability for following procedures and Tenets needs to be clearly articulated to both Company and contractor personnel.
- The competency of Company and contractor supervisors in the area of hazard identification and their availability to adequately perform the function needs improvement
- The accountability for sharing and adopting key learning's from previous incidents needs improvement
- Promoting a sense of vulnerability and always challenging people to search for lower risk ways to accomplish the work



Organizational Culture

- Basic values, norms, beliefs and practices that drive how an organization functions
- Key Organizational Culture Themes Used in this Study
 - Maintain a sense of vulnerability
 - Combat normalization of deviance
 - Ensure open and frank communications across all levels
 - Understand and address risks
 - Encourage Independent Validation/diversity of opinion
 - Perform effective auditing and act on findings
 - Demonstrate visible leadership and commitment



Recommendations

- Communicate the lessons from this study broadly to the people who can best prevent incidents.
- Deploy OE Moments around procedures, “snap decisions,” sense of vulnerability, and reliability.
- Develop and implement enhanced Hazard Identification tools and training aimed at improving JSAs, including the expectation for conducting field audits. A project is currently underway and is currently in phase 2 pilot testing.
- Complete the project to improve the way key lessons are shared and institutionalized throughout the enterprise. Project is currently in phase 3.