Break-Out Session 3

The Role of SPIs in Safety Performance

Group 3

Please save under a different name, e.g.
“Break-out Session 2_Group 3_Presentation”
Industries you chose to evaluate:

1. LPG-Storage and distribution
2. multi-national/multi-site
3. Explosive and pyrotechnic
1. How should SPIs look in each industry?

- LPG-storage and distribution
  - Safety critical maintenance & schedules
  - Testing regime for alarm systems and fire & gas detection (based on manufacturer’s recommendations) / including procedures
  - ATEX, explosive atmospheres
  - Emergency preparedness (fire-fighting equipment, drills, etc.) – execution and follow-up
  - Unplanned gas releases (e.g. lifting of PRV, activation of gas detection devices)
- Standing alarms
- No. Failure on demand
- No. of training of operators & drivers
- Violation of safety critical procedures
- Uncontrolled movement of vehicles (road-tanker / rail car)
- Injuries and accidents

19 March 2013
1. How should SPIs look in each industry?

- **LPG-storage and distribution**
  - SPIs recommended by trade association, but chosen by operator for upper tier sites, lower tier sites probably use consultants
  - **PRO:** consultants should be experienced in risk assessment and have wider experience
  - **PRO:** trade association – good sharing of experience and standards, interest in maintaining high standards
  - **CON:** consultant - site may not feel ownership, not tailored to operator and site
2. What kind of insights do you think the SPI can provide for the inspection in a typical site in each industry?

- LPG-storage and distribution
  - The site has most activity at one time of day (e.g. filling late afternoon) and has very low activity at other times. Difficult to inspect.
1. How should SPIs look in each industry?

- Chemical industry
  - **Safety critical inspection, maintenance & schedules**
  - Testing regime for alarm systems and fire & gas detection (based on manufacturer’s recommendations) / including procedures
  - **Emergency preparedness (fire-fighting equipment, drills, etc.) – execution and follow-up**
  - No. Near misses and accidents incl. Unplanned loss of containment
  - Permit to work
  - Alarm management
  - No. Failure on demand
  - No. of training of operators and contractors
  - Violation of safety critical procedures
1. How should SPIs look in each industry?

- Chemical Industry
  - SPIs some are mandatory chosen at corporate level, additional local indicators chosen by operator
  - PRO: ownership, knowledge of process
  - PRO: consultant could support the process in some enterprises (“neutral view”)
  - CON: owner needs awareness of “tunnel vision” and missed opportunities
  - COM: consultant may hinder the “ownership process” for the SPIs
3. Typical strengths and weaknesses industry in
1) selection of SPIs and 2) implementation

• Begin here …