

## Break-Out Session 2

# LPG/LNG Inspection Focus and Techniques Group 1

*Please save under a different name, e.g.  
"Break-out Session 2\_Group 1\_Presentation"*

## 2. Safety Reports, Safety Management Systems (SMS) and the Major Accident Prevention Policy (MAPP)



- Question no. 2                      Safety Reports
- 1. Group see no great difference in the expectation of the content of a Safety Report for the LPG /LNG sites from other types of Seveso sites.
- 2. Lesson Learning from historical accidents in the sector should be included in the report and form the basis of the risk assessment section.
- 3. They should consider initiating events from outside of the sites, i.e. wind turbine failures etc.
- 4. Risk figures need to be realistic and supported
- 5. The smaller sites do not see the Safety Report as being of any value to them, just a paper exercise

## 2. Safety Reports, Safety Management Systems (SMS) and the Major Accident Prevention Policy (MAPP)



- Question no. 2                      Safety Reports
- Challenges for assessing reports
- 1. verifying the historical and accident data
- Have they recorded all accidents / incidents near misses / etc.
- 2. Difficulties in accessing data that may have been reported to other agencies
- 3. Lack of or poor communication with the External Emergency Services, the measures not described adequately in the report
- 4. The Internal Emergency Plan and training and the organization for emergencies is often not described fully, allowing for the small numbers of people on the site.

## 2. Safety Reports, Safety Management Systems (SMS) and the Major Accident Prevention Policy (MAPP)



### Main advantage for the Safety Reports for LPG /LNG

- Is a simple business
- Very few operations
- Well described operations
- Well standardized facilities

### Verifying the contents of the Safety Report

- Verify the risk analysis, the assumptions taken, often find discrepancies
- Provide detailed guidance to the operators on how the safety reports are compiled
- Use risk assessment tools like LOPA, consequence modelling to verify the data in the report and the protective measures on the site

## 2. Safety Reports, Safety Management Systems (SMS) and the Major Accident Prevention Policy (MAPP)



- SMS and MAPP
- Should address all of the 7 elements in Annex 111
- Be fundamentally the same as any other sector
  
- Operational measures are a natural strength of the sector as the operations are very standardised and structured
  
- Challenges
- Emergency Planning is usually poorly dealt with, as is Organisational measures as very low personnel numbers available
- Management of Change poorly described, no procedures in place to assess minor changes on the site and the effects on MAH
- Personnel changes are not often considered as changes

## 4. Findings from past LPG/LNG Inspections



- Question No. 4
- Plant Integrity
- Some have had difficulty to getting specific test records for individual items of equipment associated with a storage vessel for the 10 year checks etc.
- In some states the operators of pressure equipment are required to submit on line records / proof of statutory tests
- Look for tell tale signs for leaks
- Condition of site painting is a good indicator of the condition of the plant
- Evidence that safety systems are functioning and haven't been breached ( use of permit systems etc) and documentation to support the site claims

## 4. Findings from past LPG/LNG Inspections



- Question No. 4
- People
- Issues about operator training and unclear responsibilities
- There are difficulties in communicating with drivers etc. as they are very transient on the sites
- More focus required on the security of the sites
  
- Processes
- Aging of old plant / corrosion protection / labelling
- Need safety critical equipment and a good maintenance programme
- See evidence that they are not keeping with their own maintenance schedules, records being maintained etc.
- Poor control on storage of full /empty/ scrapped cylinders

## Questions for Checklist

1. What is the maintenance plan for a specific piece of equipment?  
Check the records to verify the plan is being adhered to
2. Using the risk assessment data for the site, ask to verify the reliability of the elements on the site, i.e gas detection, sprinkler testing
3. Check there are formal procedures for control of access onto the site and training on the site
4. Check a recent change on the site and verify that procedures were followed
5. Ask for the most recent test of the Internal Emergency Plan, the scenario tested, any outcomes from the test and were the lessons learned adapted into the plan?
6. Always use the reports of the last inspection for compliance check