



Break-Out Session 1

LPG/LNG Inspection Strategy

Group 4

*Please save under a different name, e.g.
"Break-out Session Group 4_Presentation"*

1. Main challenges in inspecting LPG/LNG sites



Main differences and similarities

- Both are pressurized tanks, from that part it is the same, but the big difference is that one of them is cold the other is not cold (but gets cold when released).
- Focus on operational control, same inspection strategy for LNG and LPG. Basically the same approach.

Main challenges in inspections

- Are the right questions asked? Do I get the right information and quality of data? Change in ownership, who is responsible during transition of owners? For example when leakage/pollution on site new/last owner.
- Communication between operator and authority – is there adequate communication?
- When the company does not have the adequate paperwork including safety reports etc...and does not consider themselves as a Seveso-site even though they are one.

1. Main challenges in inspecting LPG/LNG sites



- Coordination and working together with different agencies can be a challenge.
- Inspection body different from the permitting body and sometimes the communication is not the best (Portugal). Inspections usually one day on site. Technical knowledge can be an issue for general inspectors, focus on operational issues.
- Many Seveso inspections together (Belgium), team of two inspectors choose themes annually on what to inspect, sometimes follow up (no new themes), sometimes campaigns on specific topic e.g. corrosion on pipe-lines.
- Challenge in ownership responsibilities on gas related sites. Tanks owned by different company than owner of site and owner of the gas (Norway). Similar in Sweden, but here we have one company that has the permission...the user should have the permission and on them we put the demands. One has the overall responsibility

1. Main challenges in inspecting LPG/LNG sites



- Helsingborg we have many Seveso companies on a site (old AGA site) many that have businesses on-going, but they are closely connected to each other and therefore someone has to be responsible for co-ordination of the companies...that is not in Seveso, but in ATEX-regulation in Sweden.
- In Belgium sometimes an self owned distribution depot divide up the company in different parts, but we regard them and treat them as one company.
- The user of the vessel is important in Austria. The utilities is run from one of the owners and is responsible for the maintenance. Sometimes a big discussion between the companies.

4. Large sites, small and medium-sized companies, unmanned sites (Part 1)



Part 1: Large vs. small and medium-size sites

Checklists

Yes, checklists are used in many countries during inspections. In Belgium there are checklists on the homepage. Yes...show me, how do you do that? etc. The inspector has to decide where to go further etc.

In Finland they send out a program on what the topic is, but no checklist.

4. Large sites, small and medium-sized companies, unmanned sites (Part 1)



Part 1: Large vs. small and medium-size sites

SMS strenghts/weaknesses small-big sites

Vulnerable at small companies – one person who knows everything.

Could be weak or strong depending on the situation.

Difference if self-owned company small (something on paper, but we know what we are doing) or big company (systems on paper, but sometimes no people to run it)

Management of change, the number of persons to run the facility, what do you do when people are sick and cannot come to work?

4. Large sites, small and medium-sized companies, unmanned sites (Part 1)



Part 1: Large vs. small and medium-size sites

Minimum technical knowledge

Italy minimum knowledge (presentation).

In Sweden, law, you should have knowledge. MSB published a paper regarding knowledge divided into small bottles and tanks, it points out what the education/knowledge should be. When you have a permission you need a person with the knowledge needed for what you are doing.

In Finland supervisor (nominated by company) has to take a test, difference on test regarding what you are going to supervise.

4. Large sites, small and medium-sized companies, unmanned sites (Part 2)



Part 2. Unmanned LPG/LNG sites

Belgium: Problems with storage depots at no time there is an operator there, the driver is completely alone there by delivery, no one to start emergency measures if anything happens. Special requirements for this type of sites?

In Sweden it was a demand of two persons in the beginning, but then you have to make an instruction for what the driver should do when he comes/leaves the area. If something happens, who does anything then? He is alone on the site, but he is not alone in mind, because somebody on the factory knows he is there and should alarm.

4. Large sites, small and medium-sized companies, unmanned sites (Part 2)



Part 2. Unmanned LPG/LNG sites

Different solutions, for example, it could be operated via other site and control with camera. If the operator does not see on the camera, they cannot operate the truck.

Technical things with holding button/man down system – Norway. Of course, big issue, some sites are for bunkering the ferries and it could be lots of people in the neighbourhood.

Cyprus, unmanned during working hours, but cameras.

Inspections questions related to questions 1 and 4



How do many people do you need to run a company? What is your strategy if some people are ill and cannot come to work?

What do you consider to be the main risk of your site?

Unmanned site: What are you going to do in case of an accident of unloading and how are you going to notice that there is something wrong?

Unmanned site: Emergency teams, do the fire brigade know about the risks and what to do in case of an accident? (if none of the company employers are available to support) Situation might change from emergency training and what might happen during an actual incident----gates locked, people gather around...you need to get them from there.