

IPLOCA SAFETY WORKSHOP; GENEVA JULY 1, 2015

Contribution of Group 4

The Group has been instructed to look more in detail of the chosen cases (2) in order to understand the role of the Safety Myths.

- It should be noted if the myth recognizable in the description/analysis,
- In which way is the Myth useful, what are the benefits,
- In which way is the myth detrimental to the analysis of the case, what are the main drawbacks
- What could be done to weaken or avoid the detrimental effects of myths?

Case Study 1: Propan Gas Explosion - Speaker: Leo Maas

DESCRIPTION

Four workers were involved in a sudden outbreak of fire caused by a propane leak while they were performing welding activities inside a welding tent.

Due to the torch's gas hose becoming disconnected, propane gas leaked out resulting in a build-up of propane inside the welding tent. Welding triggered instant ignition of the propane gas which had built-up inside the welding tent.

CAUSES

Inspection revealed the hose-crimped hose clamp connection on the torch was faulty.

- Incorrect crimping / unsuitable tool used in the torch clamp.
- Lack of operational training on how to use the crimping tool.

ACTIONS

Operating methods:

- Inspection of all materials;
- Preparation of the "Using welding torches in safety" procedure.

Training methods:

- Awareness campaign for personnel through Tool Box Meeting.

SAFETY MYTH	Which role played the Myths in this case
<i>All accidents have causes which can be found and fixed.</i>	This accident could found and be avoided
<i>Different types of adverse outcomes occur in characteristic ratios.</i>	No, there is no evidence
<i>Human error is the major contribution to accident and incidents.</i>	Yes, in this particular case it is. The Gas bottle should have been placed outside of the tent.
<i>Accident investigation is a rational search for root causes.</i>	Not always, but in this case it should be because the accident can be categorized as HIPO
<i>Systems will be safe if people comply with procedures / standards.</i>	Yes, more or less, but the procedures and or standards shall reflect always the actual state of the art (safety). In this particular case, no procedure was available.
<i>Achieving world class safety performance conflicts other business objectives.</i>	Not at all, safety counts at the end of the day and increases the reputation of any company.
<i>There is only on solution for safety: doing it the client way.</i>	No, but Clients system and procedures shall be considered on projects.
<i>World class performance requires rigid compliance and minimal variability.</i>	Yes, but there must be room for variations to increase safety performance.
<i>The prevention of minor incidents will also prevent higher consequence incidents</i>	Yes, this is in the most cases true.
<i>All incidents should be investigated with the same thoroughness.</i>	No, this has to be decided case by case. In this particular case an investigation was not required
<i>Safety training of workers ensures that they will make safe decisions.</i>	Safety training increases workers awareness. It is recommended to carry out a LMRA prior start of the Job and daily routine inspections of the work places.

In this case, 99% of required actions are named, it should be added, installment of the gas bottle outside of the tent and execution of Last Minute Risk Analysis.