Step Change Safety Alert Template

Alert Title

Gas leak during pigging operation

What leaked and where from? E.g.: "Lube oil leak from compressor system open vent"

Incident Date

01/07/2013

The date on which the incident occurred, not when this form was completed

Location Type

Fixed Production

E.g. Floating/Fixed Production, Drill Rig, Vessel, etc.

Specific Equipment Involved

Bleed point/pig launcher

Give as much detail as possible about the equipment involved

Description of What Happened

During routine pigging operations, a temporary hose used for Nitrogen (N2) purging, ruptured on re-pressurisation with condensate of the Condensate Export pig launcher. The hydrocarbon release was detected on the platform fixed fire & gas system and automatically initiated a platform Surface Process Shutdown (SPS) and blow-down (EBD)

Be as detailed as possible. Give equipment history and approximate time(s) of actions/occurrences related to the incident

Cause of Incident

The main cause of the incident was normalisation to a workaround for connecting a nitrogen supply to the launcher. The dedicated 2" purge connection was not fit for purpose so it had become common practice to utilise an alternative tie-in point at a local pressure gauge double block & bleed

Build from OIR/12 checklist

Incident Consequences

Release of 28kg of condensate
Single detector high level gas indication.
Automatic shutdown, blown down and deluge release as per cause and effects.

Include the release itself and any subsequent emergency actions/dangerous occurrences

Lessons Learned

Human factors were involved and concluded to be the mis-application of a bad rule based on a successful outcome in the past. A conscious 'deliberate' action which seems to be appropriate given historical evidence to substantiate the decision. This is based on evidence gathered that the dedicated 2" purge connection has never been used and the alternative tie-in point has been the normal purge point.
The temporary hose was not isolated or disconnected prior to introducing hydrocarbons into the launcher. This had become normal practice and the omission of a step in a sequence of actions brought about by miscommunication and mis-understanding when it came to isolating and disconnecting the temporary hose.
At each step in the task there was the opportunity to intervene, to challenge, to make a change, to peer check. As each of these opportunities were lost the incident became more inevitable

Include a few bullet points clarifying what was learned from the incident

Recommendations/Actions

Increase the level of challenge and verification via the line and via third parties to improve and ensure operational Integrity
Operations Leadership to change tolerance of Operators not following procedures, processes, work instructions etc

Include a few bullet points stating any recommendations/actions that will be made/taken as a result of the lessons learned

Contact Details (Optional)

If you would like your submission to be anonymous, leave this section blank