Step Change Safety Alert Template

Alert Title

Loss of Production – Hydrocarbon Release

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

Incident Date

19/03/2013

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

Threaded connection on reciprocating gas export compressor

Give as much detail as possible about the equipment involved

Description of What Happened

During routine operations a member of the Ops Team smelled hydrocarbons in the vicinity of the Reciprocating Gas Export Compressor K2060. On investigation with other members of the Operations Team it was discovered that a 1" threaded pipe had parted on the compressor inner packing vent line.

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

Cause of Incident

Integrity of Tools, Plant/Equipment, Materials, Products
- Inadequate design/specification/management of change

Build from OIR/12 checklist

Incident Consequences

The compressor was shut down and depressurised and due to the line venting into the common LP Vent Header a decision was taken to activate a full production shutdown and blow down. Although fully operational no fixed gas detection systems activated during the incident and gas could not be picked up by personal gas detectors at a distance of 1m away from the failed pipe. The failure of the vent connection to the compressor caused a hydrocarbon gas release at 0.005 Bar(g) pressure.

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

Lessons Learned

- Ensure that piping and connection fatigue is appropriately managed across all Operating assets.

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

Recommendations/Actions

- *Ensure that a robust strategy for managing vibration anomalies is in place*
- *Ensure vibration / fatigue is considered in any Risk Based Inspection scheme*
- *Review inspection procedures in place and ensure they include condition assessment of pipe supports, particularly those associated with reciprocating machinery*
- *Ensure that pipework and equipment contained within vendor packages are included in the RBI database and are risk assessed accordingly*
- *Ensure close out of anomalies in a timely manner*
- *Ensure regular vibration surveys are undertaken in identified areas of high vibration and that the results of these surveys are fed back into the RBI model*

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