

Step Change Safety Alert Template



Alert Title

Minor hydrocarbon release whilst extracting the cartridge from a pump casing

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

Incident Date

June 2013

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

Location Type

Fixed production installation

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

Specific Equipment Involved

Pumping equipment

Give as much detail as possible about the equipment involved

Description of What Happened

Whilst extracting the pump cartridge, an amount of residual oil, water and gas was unexpectedly released from the bottom of the pump to the two deck areas below. The exact quantity is unknown, as the pump had previously been flushed, drained and positively isolated. However, calculations provided by the pump manufacturer estimate that the maximum amount would have been in the region of 52 Litres. The liquids and evolved gas pooled directly under the pump and were contained on the deck areas. However, gas in sufficient volume was present and due to the still air conditions, this activated 3 gas heads in the module. Consequently, the platform GPA and ESD 1 was auto-initiated which resulted in the complete shutdown and blowdown of the platform.

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

Cause of Incident

Inadequate design of pump casing drainage

Build from OIR/12 checklist

Incident Consequences

Hydrocarbon release

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

Lessons Learned

- Equipment flushed, drained and positively isolated as per procedures still presents a loss of containment risk if the equipment drainage and flushing points are not adequate in terms of number and location.

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

Recommendations/Actions

- Source a more suitable bund as an interim measure until feedback obtained regarding possible drainage modifications.
- Update procedure for flushing, draining and isolating pump for outage, taking into account whether pump is being removed for maintenance after a 'failure' or for a cartridge 'upgrade'.
- Add lessons learned to WCC for task to ensure that this issue is highlighted the next time the task is repeated.

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