

Alert Title

Hydrocarbon release from body cavity bleed port on emergency shutdown valve.

Incident Date

3rd May 2013

Location Type

Fixed Production Platform

Specific Equipment Involved

Emergency shutdown valve

Description of What Happened

Maintenance work was completed on part of the topsides production systems which involved replacing an emergency shutdown valve. Following completion of the maintenance work, gas was being reintroduced the system and as such gas was being fed forward to the gas header. An individual was equalising the pressure across the emergency shutdown valve via a manual by-pass valve. Following the equalisation operation the emergency shutdown valve was opened remotely from the control room. As the valve began to travel the individual was alerted to the presence of hydrocarbon gas via a bleed port on the body of the emergency shutdown valve. The individual exited the area and contacted the control room. A general platform alarm and class 1 shutdown was activated automatically as a result of gas detection.

Cause of Incident

Incorrect fitting of bolts after maintenance

Incident Consequences

Hydrocarbon release and emergency shutdown action

Lessons Learned

- The bleed port on the valve was found to be hand tight and two turns from seated. The valve body had been painted, including the bleed port, in this position.
- During factory testing by a 3rd party, the valve was successfully pressure tested in the open and closed positions so the above was not identified.
- During the remote opening of the valve the bleed port was subject to pressure and the gas escaped due to the bleed port being hand tight.

Recommendations/Actions

- Ensure valves are tested in all positions where valve integrity may be compromised to ensure that they have full integrity.

Contact Details (Optional)

Andrew Howard, Hydrocarbon Release Prevention Focal Point, Talisman Sinopec Energy UK