

Brushing crystallised product from pipework results in release



Description of Process:

Inspection personnel were conducting a visual inspection on a system which was in a shutdown state but had not been drained down, when a leak occurred on a line they were inspecting.

Description of Incident:

An inspector was conducting visual inspection of pipework within the condensate sweetening unit of an onshore gas terminal, during this inspection an area of external pitting was identified on a caustic line, the area of pitting had a white crystallised substance on the surface which was wiped from the area resulting in a fine spray of liquid emitting from the pitted area, no contact between the individual and the released liquid occurred.

Due to the system being shut-down but not drained down the leak was projected at head pressure from adjacent pipework and vessels.

The area was vacated immediately and made safe by erecting barriers. The line was isolated to stop the emission of liquid and remedial work was undertaken.

Good Practice Guidance:

- The prevention and control of this type of incident centres around timely inspection and anomaly rectification. Failures of this type will be revalidated using RBI process for piping.

SAFETY ALERT

- Personnel must take care whenever any contact is made with pipework that is suspected of having surface corrosion, and specifically if any material is to be removed in order to facilitate inspection.

Other useful resources:

Asset Integrity Toolkit: <https://www.stepchangeinsafety.net/safety-resources/publications/asset-integrity-toolkit>

Hydrocarbon Release Reduction Toolkit: <https://www.stepchangeinsafety.net/safety-resources/publications/hydrocarbon-release-reduction-toolkit>