

Crude Spill in a tank pit

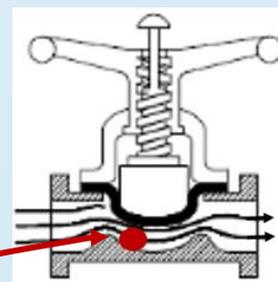
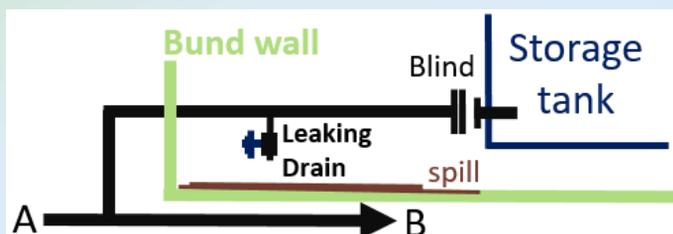
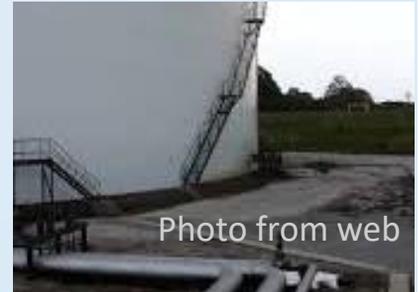
EPSC Learning Sheet , October 2019



EPSC

What Happened:

At a refinery a crude line was drained to place a blind before a tank that was in maintenance. During a next transfer ca 100 ton crude leaked through the drain valve into the tank pit. The crude was not ignited.



Leaking drain valve

Aspects:

- Crude contains sludge that can compromise the closing of hand valves, as was here the cause of the leak
- The drain valve was not secured with a blind or end cap
- The transfer system had not undergone a leak pressure test, after being opened and closed (a blind-flange was placed)
- It is good practice to walk the line before, or just after starting, a transfer. Notice missing end-caps after a drain!
- The detection of the large crude leak only coincidentally happened by an operator smelling the crude during the night
- ATEX compliance in the tank pit did help to avoid ignition
- Checking the tank level versus the pump or flow speed can help to detect leaks or wrong line-up in an early stage

Validate the transfer from and to tanks