

## Lessons Learned

### Incorrect Pressure Relief Valve (PRV)

#### Incident:

Tank 3-23 (containing Piperazine) momentarily developed high internal pressure within 100% of maximum designed pressure causing the PRV to momentarily lift. It was later found that the PRV had the wrong settings which were slightly over the tank's design

**What:** High pressure on tank 3-23

**When:** 21-February-2022

**Where:** OTH, Houston, USA

#### Summary:

On 021-February-2022, a couple of mechanics were working on the seal pot for tank 3-23. In order to do so, they had to turn off the tank's automatic vent valve to manual mode. Upon completion of work, they informed the Control Room operator to turn the vent valve back to Automatic mode. This action, however, was not completed allowing the vent valve to remain closed under manual mode. As pressure started rising inside the tank, alarms related to that condition were not properly acknowledged so the internal pressure continued to rise. Eventually the PRV lifted momentarily, and it was later verified that the internal pressure of the tank reached 100% of the maximum designed pressure. Once the vent valve was returned to automatic mode, the condition was normalized

#### Why did this happen?

- Failure to return the vent valve back to automatic mode as requested
- Failure to recognize the high-pressure alarms from tank 3-23
- The installed PRV had 2.17 psi settings instead of the required 1.14

#### Related essentials / Directives / Procedures:

- Proper communications
- Alarm recognition
- PRV/Mechanical Integrity Program

#### Lesson learned and follow-up for each site

- Alarm recognition requirements were covered with all Control Room operators
- Every PRV at every tank was verified to be of the right setting and PRV replacement program adopted

#### For further information please contact:

Pat Mentzel, Terminal Manager [pat.mentzel@odfjell.com](mailto:pat.mentzel@odfjell.com)

Or

Christophe Mediavilla, Operational Excellence Manager

[christophe.mediavilla@odfjell.com](mailto:christophe.mediavilla@odfjell.com)

