SAFETY
ALERT

Crewmember burned while draining fluid from flare stack

ALERT 1-22

WHAT HAPPENED:

The Injured Person (IP) went to the ignited flare line and opened a ball valve on the flare stack in order to drain fluid from the flare stack. IP did not turn off the ignitor on the flare stack prior to opening the valve.

As fluid drained from the line, it allowed gas to flow through the line to the flare. At this time, the flare ignited the flammable gas, with the IP still in the area around the flare stack. Flammable liquid then began flowing out of the flare and falling onto the IP, burning him. The IP was wearing PPE, including fire resistant clothing and a hard hat, at the time of the incident.

The IP sustained 2nd degree burns on his hands, face, lower back and small areas on his legs.

CONTRIBUTING FACTORS:

1. Employee was tasked with performing a job on third party equipment
2. Fluid in the flare line impeded the flow of gas vapors to the flare stack ignitor. When the fluid was drained, the gas vapors were ignited.

LESSONS LEARNED:

1. Crewmembers should not perform any maintenance, repairs, or other actions on third-party-owned flare stack.
2. Barricade and Buffer zone procedures were updated to re-classify the flare stack as a Red Zone Barricaded area, which requires a permit to access.
3. As a result of the incident, the third-party owner of the flare stack and flare line installed a tank on the flare line which allows fluids to accumulate and provides an un-obstructed path for the flammable gases to flow to the flare stack. This tank eliminates the need for any employees to drain fluid at the flare stack.