Incident Report

Completed by: Boone Brothers

Date: May 28, 2020

Location of Incident: BD
1211 Mary Magnan Blvd.
Madison GA 30650

Release Point: Sterilizer Line 4

Date of Incident: May 26, 2020

Description of Incident:
On May 26, 2020, operators received an alarm from the Baseline system but could not determine the cause. Upon further investigation on May 27, 2020, maintenance discovered a small leak at a flanged connection above the separator tank. The release was calculated to be approximately 1.56 pounds.

Background:
During a planned shutdown, May 18 - 21, 2020, piping was fabricated to install a rupture disk and pressure gauge with a tell-tale indicator. These connections are flanged and bolted together with gaskets at each connection. During sterilant removal, the emission stream is pumped from the chamber to the regenerative thermal oxidizer (RTO) through a separator tank. The rupture disc was installed as an industry best practice to reduce the risk of accidental release of EO from the pressure relief valve (PRV).

Root Cause Investigation:

The operator received an alarm and proceeded to investigate according the procedure but could not determine the source. On May 27, 2020 maintenance personnel conducted additional investigation with a hand-held gas meter. The leak was discovered at the flanged connection which held the rupture disc.

The maintenance personnel tightened the bolts to stop the leak. The cause of the release was inadequate tightening of the connecting bolts during installation. The release was calculated to be approximately 1.56 pounds.

Corrective Actions
The following steps were taken as corrective action:

1. Verify the bolts are tightened to specification
2. Verify other new flanged connections for the rupture discs do not have the same failure
3. Review the return to service procedure with operators, engineers, maintenance personnel, and managers