MANUFACTURING SAFETY ALERT

Ask Yourself
"Could it happen here?"

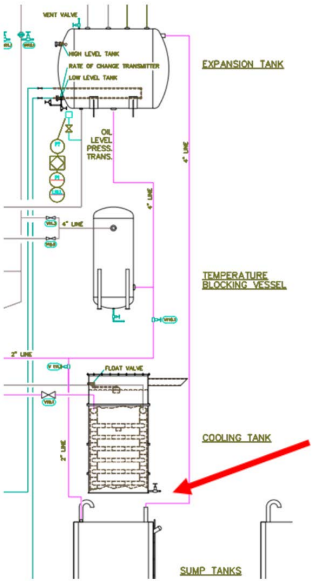
DESCRIPTION OF EVENT

Process Safety SIF

During the winter holidays, the thermal oil furnace systems were idled while outside temperatures dropped to approximately -28°C. During this time, the expansion tank level transmitter began to behave erratically and ultimately caused low-level trips on the furnaces. These trips triggered the backup diesel pump to start.

Electricians inspected the pressure transducer and confirmed it was functioning correctly. Further investigation found that the expansion tank was slightly pressurized, which should not occur since the expansion tank is vented to atmosphere.

Continued investigation determined that the vent line, which was exposed to the -28°C temperatures, had frozen. The blockage was located on a horizontal section of the vent line before it dropped down to the storage tank.



SUGGESTED ACTIONS

- Thaw the horizontal section of piping with tiger torch.
- Investigate applying heat tape and insulation to horizontal section of piping.
- Minimize water entering the thermal oil system by regularly checking and draining the low point drain on the storage tank.

MOST IMPORTANT TAKE AWAY

Cold-weather conditions can affect venting and instruments. Vent lines must be designed, protected and inspected to prevent freezing and unintended system pressurization.

MAG Manufacturing Advisory Group

BC Forest Safety

BCFSC welcomes all incident or near-miss submissions. To protect your privacy, we will review and remove all identifying information.

To share an incident or to subscribe to the Safety Alert of the Week, visit: www.bcforestsafe.org/safety-alerts/

Scan the QR Code with your mobile device's camera to access this alert.