

SHE Incident description

Date	6 November 2018
Time	08:25
Location	B28005 – Hot oil circulating heater
Description	Tube leak inside Heater B28005 (Hot oil circulating heater) which resulted in a fire inside the heater. The system was isolated and was being made safe when the tube failed resulting in flames expanding to outside the heater. This was extinguished by the internal fire department who were onsite as a precautionary measure.
KUE Scenario	Loss of containment
Consequences	Damage to the heater B28005



Summary of root causes

ROOT CAUSES

1. RC1 – Operational changes done without formal management of change process being followed.
2. RC2 – Non-availability of an operations philosophy for the B28005, including OWAP and risk based monitoring requirements (aggravated by not considering the integration of the hot oil system with other units).
3. RC3 – Risks identified in PHA studies were not adequately addressed in operating of unit.
4. RC4 - No maintenance strategies for the non-pressure envelope components of heater (was risk based).

Learnings to be applied

SHE INCIDENT LEARNING

1. Management of change process should be followed for all changes that effect operations. Not just plant equipment changes.
2. There should be an operating manual (OWAP, design manual) available which forms part of your PSI and from which SOP's are written.
3. Process hazard analysis should consider and document all applicable cases. It should not only document credible scenarios but also scenarios that were considered but found to be non-credible.