



Learnings From Incident

Pipeline Leak in Harbour at JBS



Pipeline Leak in Harbour at JBS



Incident Description

- On Monday the 15th of April 2024 JBS Completed a delivery of low Sulphur fuel oil ((LSFO) and bunker gas oil (BGO) successfully to the Astron Energy barge.
- Three bunker lines are located inside the tunnel, the bellow ruptured, and product leaked due to small crack on the bellows.
- Product gradually seeped out of the pipeline and accumulated in the tunnel which activated bilge pump.
- On the 16th of April, JBS terminal received a notification from TNPA of a production sheen on the water in the corner of the Harbour basin near the barge loading point at the Wharf.
- The JBS terminal immediately activated emergency response plan and they boomed off the area and started the clean-up operation.
- An estimated 50 barrels of low Sulphur oil leaked to water and 88 barrels contained in the tunnel, all was fully recovered over a period of two weeks.

Findings

- Bellows failed mechanically and hydrocarbons started leaking into the tunnel.
- The failed bellow had a manufacturing flaw where the inside cylinder was incorrectly welded to the bellow.
- There was insufficient time for safe valve closure to prevent line surge.

Lessons Learnt

- LPO was only done on the start of the bunkering process.
- Risk Assessment through LPSA was not done by the team, as the ship stops were frequent occurrences, and they did not recognize the risk of having adequate time to respond.

Bellows



Bellows in the 10 inch VLSFO line



Bellows failed weld area