



भारत सरकार / GOVERNMENT OF INDIA  
पत्तन, पोत परिवहन और जलमार्ग मंत्रालय  
MINISTRY OF PORTS, SHIPPING AND WATERWAYS



नौवहन महानिदेशालय, मुंबई  
DIRECTORATE GENERAL OF SHIPPING, MUMBAI

F. No.25-19011/6/2020-NT-DGS

Date:26.12.2023

**Casualty Circular – 01 of 2019**

**Sub: Fire and explosion on tug resulting in loss of four lives**

**Summary of Incident:**

While a VLCC was discharging cargo of crude oil at Vishakhapatnam SPM, on 11.08.2019 PM hrs, area suddenly started experience squalls with winds upto 43 kts, which resulted in excessive strain on the two SPM mooring hawsers. The weather conditions eventually led to parting of SPM mooring hawsers and drifting of tanker with cargo hoses connected, thereby resulting in breaking of the two cargo transfer hoses from the 'marine breakaway coupling' (MBC). While one of the MBC operated correctly, other one did not and was allowing some oil to seep out causing oil pollution. This oil seepage could not be arrested by the terminal contracted operation and maintenance (O&M) service provider.

The tug which was providing O&M services at the SPM was in dock at Vishakhapatnam since 27.06.2019, and was undergoing repairs and renewal surveys. The replacement tug arranged by the SPM O&M service provider was unable to handle the leaking SPM cargo hose, therefore the service contractor decided to pull out the tug in dry dock for picking up the leaking cargo hose, removing the MBC and blanking the hose to arrest the oil leakage. The master of the tug which was in dry dock, informed owner (who was also the contracted O&M service provider at the SPM) about the condition of the tug, however the tug was asked to come to SPM immediately for undertaking this emergency job. The tug departed repair berth on 12.08.2023 at 09:00 hrs and arrived at SPM by 09:40 hrs.

Divers and riggers boarded the tug, while the tug picked up the SPM cargo hose on deck for removing the MBC and blanking the hose. While the hose end was on deck, the leaking crude oil begun to spill on deck and seep into engine room through various openings on deck where work was in progress during vessels drydocking. Further, as soon as the MBC was opened, lot of oil spilled on the deck, which caused now crude oil to drip on top of running machineries in the engine room, such as generators etc. While second engineer raised this issue with Master and was trying to clean up, there was a fire in engine room followed explosion, which was exacerbated crude oil spilled on deck. The personnel working on deck jumped in water and were rescued by other boats nearby. The incident resulted in loss of four lives.

**Causal Factors:**

1. The tug deployed at SPM for O&M services was capable of firefighting and oil spill response services, however its replacement tug for the period while it was in dock, did not have the required capabilities for O&M services at the SPM

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2. O&M service contractor failed in providing services at SPM, which it had contracted for.
3. Port and other Authorities could not take adequate action for oil being spilled from the leaking MBC, and in-turn asked the contractor to take action for the oil spillage.
4. O&M service provider used the tug which was not in seaworthy condition as it was undergoing repairs and renewal surveys, which resulted in the incident. The company showed complete disregard to the applicable Statutory provisions.
5. Port and the Oil Company did not have adequate supervision over the actions being taken by the SPM O&M service contractor.

**Action Taken:**

1. It was decided to remove the leaking MBC and blank the hose end to stop leakage.
2. The oil leaking on tug's deck was being transferred to empty gurgon tank on board the tug.
3. All personnel who had jumped in water were picked up by other boats nearby.
4. All injured were transferred to hospital for treatment.

**Lessons Learnt:**

1. All vessel to be used are to be fit for purpose and seaworthy.
2. All replacement vessel for the interim period should be of matching capabilities and capacity.
3. Port and Oil Company should keep adequate supervision of the actions being taken in or around the port, to ensure safety of vessel and personnel on board.
4. For operations at SPM, port and oil company should ensure that adequate actions are taken well in time to counter expected or unexpected weather conditions, which included providing extra tug, casting off vessel etc.



7.26/11/23

(Capt. Vikram Singh Manhas)  
Dy. Nautical Adviser cum Sr. DDG (Tech.)

To,  
All stakeholders through DGS website.