Casualty Circular No. 24 of 2009

(Regulatory/Guidance/Information)

NO:11-NT (33)/2005

Dated: 17.08.2009

Subject: Oil pollution incident from an Indian ship during berthing operation in foreign port

NARRATIVE

An Indian oil tanker, GRT - 55178, built in 1987, while berthing in foreign port made contact with the jetty and spilled approx 150mt to 180mt murban crude oil on 07.04.2005. The vessel arrived in foreign port on 06.04.2005 at 0412 hrs to discharge 78,538 mt. of murban crude oil, API 39.91. The vessel anchored upon arrival. On 07.04.2005, the pilot boarded the vessel at Fairway buoy at 1452 hrs to berth the ship at the oil terminal. As the vessel approached the berth, the Master had observed that there were two Yokohama fenders attached to the jetty. At 1612 hrs,. the vessel had passed her first lines ashore (the forward and aft spring ropes). At 1620 hrs the aft spring rope parted, the vessel immediately passed another rope to replace it.

The tugs were not able to hold the vessel against the strong tidal flow so all the weight of the vessel was placed on the aft spring rope. At 1655 hrs, the second aft spring rope was sent ashore and made fast to the bollard. By this time, the vessel was pivoting by the head on her forward line, and the vessel was moving astern against the aft Yokohama fender.

At 1658 hrs, the aft Yokohama fender securing wire parted and the fender started to come out of its position. The fender was held in place with a thin wire, about 10mm. The other Yokohama fender was held in place with two heavy chains. The aft Yokohama fender drifted away from its position, and the vessel had no protection against immediate contact with the jetty. At 1700 hrs, the vessel came in contact with a corner of the jetty and ruptured its ship's side shell near starboard oil cargo tank No. 45 to the size of hole 41 cm long, 20 cm wide and 14 cm deep in shell plating. The Master took immediate action to transfer the oil from the ruptured tank to the slop tank on port side and taking the ballast in port side to increase the port list. By 1730 hrs, the flow of oil from the 4S cargo tank through the hole had stopped completely. The estimated of oil lost was between 150-180 Metric Tons. The vessel was made fast to the berth at 2040 hrs on 07.04.2005. The cargo discharging operations commenced on 07.04.2005 at 2300 hrs.

OBSERVATIONS/ANALYSISES

- The spring rope parted during berthing operations one day before the start of spring tide. The incident occurred on a day when ebb tide was flowing.
- At the time of approaching to the berth, the vessel was assisted by two harbor tugs, each made fast in the fore ward and aft part of the vessel. As soon as vessel approached the jetty, it had passed her two lines ashore, the forward spring and aft spring ropes.
- The tugs were not able to hold the vessel against the tidal flow, as all the weight of the vessel was placed on the aft spring rope. Soon after passing the spring rope, the aft spring parted. Immediately vessel had passed another aft spring line and made fast.
- Later, the aft Yokohama fender securing wire parted and as a result it came out of it's position.
- The vessel had no protection against immediate contact with the jetty. Due to the movement of the vessel towards the jetty, the vessel came in contact with a corner of the jetty and ruptured its side shell plating.
- The Master & ship staff had taken prompt action with due diligence by transferring the cargo oil from the ruptured tank to other slack cargo tanks. The action listed the vessel to port side, that assisted in minimizing the oil spill.

RECOMMENDATIONS/LESSONS LEARNT

- The Master and the pilot during the maneuvering of the vessel should monitor the movement of the vessel and use the main engine as well as tugs respectively in an efficient/effective manner to avert damages to the ship and the port.
- At the time of ebb tide, prompt use of main engine and proper co-ordination with the tugs/mooring officers stationed at forward/after part of the ship can prevent such incidents.
- The Deck Officer positioned at mooring stations in the fore and after part of the ship should initiate preventive measures by observing good practice of seaman such as placing fender and giving early warning to the bridge.
- The port authority should ensure that maintenance and securing of Yokohama fenders at oil terminal is monitored at periodical interval.
- The rate of turn indicator of the vessel should be clearly monitored by the Bridge team during the berthing operations.
- The Master of the vessel should study the Port Layout Plan as specified in the Guide to Port Entry or other Publications issued by the International Organization.
- The Master should notify the Port Authorities and other concerned Parties, in case of doubt on the safety port or berth.

Sd/-

(Capt. Deepak Kapoor)

Nautical Surveyor-cum-DDG (Tech)