

MARINE DEPARTMENT NOTICE NO. 57/2023

(Navigational & Seamanship Safety Practices)

Oil spill incident of a container ship in Hong Kong

The Incident

An oil spill incident happened on board a container ship (*the vessel*) berthed at the Kwai Chung Container Terminals, Hong Kong, when she was receiving low sulphur fuel oil (LSFO) from a local bunker barge (*the barge*). During the bunkering operation, LSFO spilled out from the air vent heads of the bunker storage tank (*the tank*) of *the vessel* onto her starboard side upper deck. About 200 litres of the overflowed LSFO accumulated on the deck further spilled into the sea over the deck side gutter bar. The bunkering operation stopped immediately, and the emergency alarm was activated on board to muster all crew members in response to the oil spill incident.

2. The investigation revealed that the contributory factors leading to this incident were that the crew failed to isolate the LSFO transfer line for the main and auxiliary engines of *the tank* before the bunkering operation, resulting in an amount of LSFO being flowed unexpectedly from another bunker storage tank into *the tank* which was not discovered by the crew until the oil spill accident happened; and that the crew failed to follow the bunkering procedures of the shipboard Safety Management System to monitor the bunker loading process in respect of the rate and quantity with timely remedial action taken including giving ample warning to *the barge* at the final bunkering stage, and communicating with *the barge* on the bunkering operation effectively.

3. The investigation also revealed that *the vessel* did not follow the approved drawings of *the vessel's* Classification Society to fit the stop-check valve of *the tank* with a non-return function when retrofitting the fuel oil transfer piping system.

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Lessons Learnt

4. To avoid similar incidents in future, ship management companies, masters, officers, and crew members should:

- (a) isolate the fuel oil transfer lines connecting to respective fuel tanks when they are not in use before bunkering operation;
- (b) monitor the bunker loading process effectively in respect of the rate and quantity with timely remedial action taken;
- (c) communicate with the bunker barge on the bunkering operation effectively and give ample warning to the bunker barge at the final bunkering stage; and
- (d) follow strictly the requirements of the Classification Society approved drawings to fit the stop-check valve while retrofitting the fuel oil transfer system.

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Date: 31 March 2023

Action file ref.: L/M No.2/2023 in MAI/S 902/065-2022