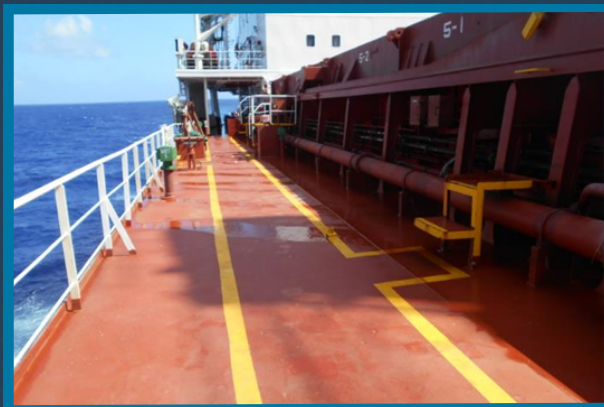




Human Element Maritime Enhancement Tool (H.EL.M.E.T)



HELMET ELEMENT 5

Item 16 “Structural Fitness for Prevention of Pollution”

FINDING: During an onboard HELMET assessment, our HELMET Assessor observed that a ballast overflow caused light pollution within port limits.

As the bulk carrier vessel was discharging her cargo, ballast water was also being pumped into her designated ballast tanks. Towards the end of the discharging operation, a small amount of ballast water overflowed on deck from one of the ballast vents.

Due to the vessel's stern trim, which was bigger than 3 meters, the water flowed along the upper deck, was mixed with hydraulic oil from the cylinders of the hatch covers and trickled to a scupper that had not been plugged properly. Through the scupper, the water ended up at the sea, causing a light pollution incident.

HOW DID THE POLLUTION OCCUR?

When the assessor started investigating the incident, he identified that No. 4P Water Ballast Tank's sensor was defective, resulting in a discrepant ullage indication by one meter. Since that defect had not been identified earlier, the necessary precautions were not taken.

As for the pollutant element, the hydraulic oil had remained on deck after the change of a hydraulic pipe that took place earlier.

Regarding the improper plugging of the scupper through which the water passed to the sea, this operation had not been performed with the adequate care.

SUGGESTION

Ballast tank sensors must be checked prior to the commencement of ballasting/de-ballasting operations to ensure their proper operation. In case a sensor is found to be defective, the relevant ballast tank must be properly monitored by the crew via manual checking to prevent overflowing.

Furthermore, to ensure that any potential overflow will be contained on the deck, the scuppers must always be well-plugged when in port.

In order to prevent similar incidents, the crew has to be well-aware of the consequences their actions can have and to always behave with the aim to break the sequence of unsafe acts and events.

Notice: Tip of the month is circulated by P@S monthly in an effort to inform the industry of the red flags raised from the implementation of our onshore and onboard HELMET risk assessment program to meet highest standards, carried out by H.EL.M.E.T. Assessors.

