

## Passive safety for a fast response

Being prepared for a pollution incident could be money well spent

For the maritime industry, passive safety is a developing concept that is proving attractive to insurers and charterers. It encompasses equipment and technologies that are permanently installed on board with the aim of preventing an incident and/or mitigating its consequences. With growing public scrutiny of the environmental impact of shipping it is not surprising that solutions once seen as 'nice to have' rather than essential are increasingly being specified.

One such is the Fast Oil Recovery System from the French company JLMD Ecological Group, which has been included in the package of environmental features specified by CMA CGM for its large container ship newbuildings delivered since the end of 2008. *CMA CGM Andromeda* (11,400teu), delivered this March, was the first box ship to be equipped with the system for recovery of bunkers. Initially designed for the cargo tanks of oil tankers, it was adapted for container ship use jointly by

# 26

**CMA CGM container vessels to be equipped with the JLMD system**



Connectors are located between container bays in way of lashing bridges [Photo: JLMD]

JLMD and CMA CGM's newbuilding department. Since the end of 2007, the reference list for the system has reached 35 ships, of which 26 are owned by CMA CGM.

The JLMD system uses Archimedes' principle to recover oil by way of pre-installed pipes and valves. Seawater is pumped into the pipe with the lowest level in the tank and pushes the oil to the highest part of the tank for recovery. Oil is recovered by a connector on deck. On a container ship this is located between container bays in way of lashing bridges, which protects it from obstruction by containers.

Connection to a salvage vessel is immediate, either by ROV or diver, reducing the potential for pollution and time spent planning a

recovery strategy. Each installation is provided with an emergency response plan that is also available to the shipowner via a secure area on JLMD's website.

JLMD has estimated that average investment in a recovery system is less than 1% of vessel cost. The company has also estimated the savings in time and money that could have been made in seven well documented pollution cases (including *Prestige*, *Erika* and *Exxon Valdez*) if its recovery system had been installed on the vessels. These estimates are based on data from Cedre, SMIT Salvage and Offshore Consulting and Supervision. Average time saving was estimated at 25% and average financial saving at \$7.5M. ■