KISH P&I CLUB

KISH P & I LOSS PREVENTION CIRCULAR KPI-LP-67-2013

(Bunkering & Points to ponder)

►Introduction:

Bunkering has an inherent risk for pollution accident. Shipping companies must be aware that the financial consequences of a pollution incident during bunkering are becoming increasingly unpredictable. Any spill, no matter how small, may result in penalties and costs far outweighing the apparent gravity of the event, reinforcing the need for every ship-owner to eliminate the risks.

Procedures to be followed during bunkering operations will be detailed in a vessel's Safety Management System. However, the following notes are to reiterate best practices and include a number of recommendations regarding the items that should be checked and verified throughout the various stages of the operation.

A more comprehensive account of prudent procedures relating to bunkering and oil cargo operations are referred to the IMO publication "Manual on Oil Pollution Section 1 – Prevention" & the latest edition of the "International Safety Guide for Oil Tankers & Terminals" (ISGOTT).

►Loading Plan:

A loading plan concerning the bunkering locations & amounts should be devised. It should generally include Specific Tank number , Sounding/ ullage prior to bunkering , Quantity in tank prior to bunkering , Quantity to be loaded , Planned sounding/ ullage on completion , Planned quantity in tank on completion , Actual sounding/ ullage on completion , Actual quantity in tank on completion & the bunkering diagram should also be attached. The diagram should not only include the tank locations & specifications but it must also clearly depict the piping arrangement & the valves location, etc.

►Check-list:

The check-list is a mandatory requirement by many Safety Management Systems. It should usually include items prior; during & after completion of bunkering.

The purpose of this circular is not to devise such check-list but only remind some important points about it.

The check-list is an aide memoir. It does not replace thinking & operation or supervision.

The main idea is to remind us of the points that may be forgotten and do this systematically & sequentially. Filling a check-list in the office is a very much wrong practice. Having a neat & clean bunker check-list is a sign that it has not been done in situ so completely useless. It should be done by hand ticking & in the area that an operation is going on. Having done so many check-lists may make us complacent towards the actual practice & without actually noting the point; just check & tick them in. This of-course is against the essence of a check-list.

It is a good recommendation that checking any operation via the check-lists may necessitate some changes & amendments to the original one. The check-list is not a rigid structure; it can be amended as necessary. The whole idea lays in the reminding points which may be overlooked not the paper-work really.

►Taking the Charge:

A senior engineer should always be appointed to co-ordinate and take charge of the bunkering operation, and it is intended that the loading plan and checklist be used by this officer. He should first ensure that all crew members involved in the exercise are fully conversant with the specification and quantity of fuel to be lifted, the ship's fuelling and tank sounding arrangements, the alarm systems and the loading sequence. It is of primary importance that all personnel on board are made aware of the intention to bunker so that the vessel's emergency response plan can be activated without delay in the event of a spill. In addition, it should not be forgotten that the bunkering facility itself may be the source of a spill, and the contingency arrangements of the barge or terminal should also be checked and discussed beforehand as far as possible & practicable.

►Signalling & Sampling:

When agreeing signalling procedures with the terminal or barge, it is advisable to consider using an audible alarm to supplement an emergency stop, recognisable by all parties. This additional defence may secure a swifter response than relying entirely on VHF contact or other methods of signalling. The communication & language barriers must also be borne in mind.

To reduce the chance of misunderstandings still further, the key elements of the bunker plan may be summarised in writing and signed by both the responsible bunkering officer and the supplier as confirmation of mutual agreement.

During the course of bunkering, representative samples should be taken and retained in line with company and regulatory requirements.

►The deck officers' involvement:

The duty officer should keep in close contact with the bunker team throughout. Moorings should be tended to ensure that the movement of the vessel is restricted to a minimum and that the ship, as far as possible & practicable, is kept upright and on an even keel.

On the other hand learning from an accident, it is important to bear in mind that the deck-officers are more familiar & experienced with handling of ropes & securing matters. It is a good practice to involve the deck officers & surely the experienced & certified deck crew for handling the bunker hoses & securing them prior attachment of flanges, etc.

This should be the case even if the hose is light in weight & handling it may not require a crane or lifting device. In a reported accident while an engine rating was trying to release the diesel oil hose; it entangled his feet & carried him overboard collapsing on the bunker barge as he was not very well aware of the dangers involving rope-work.

The engineers or engine ratings may be old hands but still a deck crew or officer is a more experienced & suitable person to do operations like mooring/unmooring of the bunker barge; lifting up & lowering down the hose plus attachments & the lashing of the hose in a proper & safe manner before any attempt to carry out the intended operation.

The above points are derived from a risk assessment process & looking back at the history of incidents involved in bunkering operations. The members are advised to pay particular attention towards the ideas herein & bear in mind the grave consequences of losing lives & assets that may burden the companies if things go wrong.