Water spray system

Interpretation of sections 11.3.1, & 11.3.3 & 11.3.4 of the INTERNATIONAL CODE FOR THE CONSTRUCTION AND EQUIPMENT OF SHIPS CARRYING LIQUEFIED GASES IN BULK (Resolution MSC.370(93))

Regulation

IGC Code 2016 edition, Chapter 11 reads as follows:

11.3.1 On ships carrying flammable and/or toxic products, a water-spray system, for cooling, fire prevention and crew protection shall be installed to cover:

... 
.7 exposed lifeboats, liferafts and muster stations facing the cargo area, regardless of distance to cargo area; and 
...

11.3.3 The capacity of the water-spray pumps shall be capable of simultaneous protection of the greater of the following:

.1 any two complete athwartship tank groupings, including any gas process units within these areas; or 
...

11.3.4 The boundaries of superstructures and deckhouses normally manned, and lifeboats, liferafts and muster areas facing the cargo area, shall also be capable of being served by one of the fire pumps or the emergency fire pump, if a fire in one compartment could disable both fire pumps.

Interpretation

a) Survival crafts protection

With reference to sub-paragraph .7 of IGC Code 11.3.1, the survival crafts on board including remote survival crafts (ref. SOLAS III/Reg. 31.1.4) facing the cargo area shall be protected by a water-spray system taking into consideration cargo area extension for fire-fighting purposes as stated in 11.1.4.

Remote liferafts located in areas covered by water-spray protection as required in sub-paragraph .6 may be considered as adequately protected.

Note:

1. April 2018 version of this Unified Interpretation is to be uniformly implemented by IACS Societies on ships constructed on or after was withdrawn prior to coming into force on 1 July 2019.

2. June 2019 version of this Unified Interpretation is to be uniformly implemented by IACS Societies on ships constructed on or after 1 July 2019.
b) Tank groups in cargo area

Expression “two complete athwartship tank groupings” in sub-paragraph .1 of IGC Code 11.3.3 means any two groups of tanks where one group is defined as tanks located in transverse direction from ship side to ship side. Where there is only one cargo tank occupying a hold space from ship side to ship side, it will be considered as a “grouping” for the purpose of this interpretation.

“All two complete athwartship tank groupings” represents an area equal to the combined area of the two largest tank groupings including any gas process units within these areas.

c) Fire pumps used as spray pumps:

11.3.4 highlights requirements for availability of fire pumps for water supply to the spray system for personnel and survival craft and muster station protection. The supply of fire water shall be redundant.

In view of the above in cases when the emergency fire pump is used to meet this requirement, its capacity, in addition to being capable of maintaining two jets of water as required by FSS Code Chap.12.2.2.1.1, shall be increased taking into account the spray application rates stated in 11.3.2.1, but limiting coverage to boundaries of normally manned superstructures and deckhouses, survival crafts and their muster areas.

For the purpose of this interpretation:

The expression “one of the fire pumps or emergency fire pump” is related to fire pumps located outside the space where spray pump(s) are located.

The expression “fire in one compartment”, means a compartment where fire pump(s) serving the water-spray system in accordance with 11.3.3 are located.

The expression “both fire pumps” means the fire pumps required in accordance with SOLAS II-2/ Reg.10.2.2.2.