How Full is Your Tank- Summer 2018

LNG as Fuel: Offloading of Tanks & Electrical Installations in Hazardous Locations

1. On ships built under MSC.285(86) or IGF Code, are they required to be capable of off-loading the liquefied gas from their storage tanks? Yes or no? Cite your source(s).

MSC.285(86)

- 2.8.1.6 Means that are not dependent on the gas machinery system should be provided whereby liquid gas in the storage tanks can be emptied.
- 2.8.1.7 It should be possible to empty, purge gas and vent bunker tanks with gas piping systems. Procedures should be prepared for this. Inerting should be performed with, for instance, nitrogen,
- CO2 or argon prior to venting to avoid an explosion hazardous atmosphere in tanks and gas pipes.

IGF (2017)

- 6.3.11 Means shall be provided whereby liquefied gas in the storage tanks can be safely emptied.
- 6.3.12 It shall be possible to empty, purge and vent fuel storage tanks with fuel piping systems. Instructions for carrying out these procedures must be available on board. Inerting shall be performed with an inert gas prior to venting with dry air to avoid an explosion hazardous atmosphere in tanks and fuel pipes. See detailed regulations in 6.10.

(Continues on next page.)

- 2. On ships built under MSC.285(86) or IGF Code, are members conducting inspection and maintenance on electrical installations in hazardous areas required by regulation to have specific training for installation in hazardous locations? Yes or no? Cite your source(s).
- 18.3.3 The procedures and information shall include maintenance of electrical equipment that is installed in explosion hazardous spaces and areas. The inspection and maintenance of electrical installations in explosion hazardous spaces shall be performed in accordance with a recognized standard.

(Refer to IEC 60079 17:2007 Explosive atmospheres – part 17: Electrical installations inspection and maintenance.)

Which refers you to IEC 60079 17:2007:

4.2 Qualification of personnel

The inspection and maintenance of installations covered by this standard shall be carried out only by experienced personnel, whose training has included instruction on the various types of protection and installation practices, the requirements of this standard, the relevant national regulations/company rules applicable to the installation and on the general principles of area classification (see Annex B). Appropriate continuing education or training shall be undertaken by personnel on a regular basis. Evidence of the relevant experience and training claimed shall be documented and available.

AND

4.4 Periodic inspections

4.4.1 Personnel

Regular periodic inspection requires personnel who are competent for the inspection required, including that they:

- a) Have a knowledge of area classification/EPL and sufficient technical knowledge to understand its implications for the location under consideration;
- b) Have technical knowledge and understanding of the theoretical and practical requirements for electrical equipment and installations used in those hazardous areas;
- c) Understand the requirements of visual, close and detailed inspections as they relate to the installed equipment and installations.

NOTE: Competencies and training may be identified in relevant national training and assessment frameworks.