MSC Guidelines for Review of Tankship General Arrangements

Procedure Number: C1-22 Revision Date: January 23, 2012

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Purpose:

This Marine Safety Center (MSC) Guideline explains the requirements for seeking plan approval for tankship general arrangement plans from the MSC as regulated under 46 CFR, Subchapter D and in accordance with the below references.

References:

- a. 46 CFR Subchapter D
- b. 33 CFR Part 157, Rules for the Protection of the Marine Environment Relating to Tank Vessels Carrying Oil in Bulk
- c. International Convention for the Safety of Life at Sea, 1974, and its Protocol of 1978 (SOLAS), as amended
- d. International Convention for the Prevention of Pollution from Ships, 1973, as modified by its Protocol of 1978 (MARPOL 73/78), as amended
- e. Marine Safety Manual, Vol II, Chapter 2 & 3
- f. 33 CFR 151 and 155

Contact Information: If you have any questions or comments concerning this document, please contact the Marine Safety Center (MSC) by email or phone. Please refer to the Procedure Number C1-22.

Email: MSC@uscg.mil Phone: 202-475-3403

Website: http://homeport.uscg.mil/msc

Responsibilities:

Using applicable portions of references (a) through (f), the submitter shall provide sufficient documentation and plans to indicate compliance with the applicable requirements. The submission shall be made electronically to the above email address or, if paper, in triplicate to the MSC's address found on the above website. To facilitate plan review and project management, all plans and information

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specified in these guidelines should be submitted as one complete package through a single point of contact for the project.

General Review Procedure:

- □ If the vessel is new and not a sister vessel, has the Application for Inspection been submitted? In general, no plan review may occur until receipt of a copy of the Application.
- ☐ Is it clearly stated what is desired from the MSC? Are all plans to be stamped/returned submitted in triplicate (if submittal is in hard copy) or electronically submitted? If submitted electronically, drawings are not stamped.
- □ Are there any special/unusual requests or a time critical element involved?

General Review Guidance:

- □ Verify applicability of regulations: 33 CFR 157.01 and 157.08, and 46 CFR 30.01-5. Requests for SOLAS certificates require compliance with reference (c), and IOPP certificates require compliance with MARPOL 73/78, reference (d).
- □ Are all spaces identified and designated on the plan?
- Double Bottom
 - A double bottom shall be fitted in accordance with 33 CFR 157.10d(c)(2) and/or SOLAS Chapter II-1, Regulation 9.
- □ Double Side
 - A double side shall be fitted in accordance with 33 CFR 157.10d(c)(1).
- ☐ Size and arrangements of cargo tanks
 - Verify compliance with the size and arrangement of cargo tanks. For an oil tanker operated only on domestic voyages, use the criteria in 33 CFR 157.19, and Appendix A of part 157. For a tanker operated on domestic and international voyages, use the criteria in MARPOL 73/78, Regulation 26.
- \Box Slop tanks
 - Slop tanks required as per 33 CFR 157.15.
- Prohibited Spaces
 - Oil may not be carried in a forepeak tank or a tank forward of the collision bulkhead, per 33 CFR 155.470.

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☐ Means of Access

- Verify that access to tanker's bow meet the requirements of SOLAS Chapter II-1, Part A-1, Regulation 3-3.
- Verify that access to spaces in the cargo area meet the requirements of SOLAS II-1, Part A-1, Regulation 3-6.
- □ Emergency towing arrangements on tankers per SOLAS Chapter II-1, Part A-1, Regulation 3-4
- □ Peak and Machinery Space Bulkheads
 - Verify compliance with the location of the collision bulkhead and other requirements per SOLAS Ch. II-1, Regulation 12.

Means of Escape

■ Two means of escape must be provided from accommodations, spaces normally manned, and machinery spaces, as required by 46 CFR 32.02-1 and SOLAS Chapter II-2, Regulation 13.

□ Location of Spaces

- Crew quarters must be located, in accordance with 46 CFR 32.40-10.
- Machinery spaces shall be positioned aft of cargo and slop tanks, in accordance with SOLAS Chapter II-2, Regulation 4-5.1.1.
- Accommodation spaces, main cargo control stations, control stations and service spaces shall be positioned aft of all cargo tanks, slop tanks, and spaces which isolate cargo or slop tanks from machinery spaces, in accordance with 46 CFR 153.234 and SOLAS Chapter II-2, Regulation 4-5.1.2.

□ Containment of deck spills

 Deck coamings and enclosed areas shall be constructed in accordance with SOLAS Chapter II-2, Regulation 4-5.1.6 and/or 33 CFR 155.310, as applicable.

□ Access Doors, Air Inlets, and Openings

Any form of opening into accommodation spaces, service spaces, control stations and machinery spaces shall not face the cargo area, as per SOLAS Chapter II-2, Regulation 4-5.2.1.

Guardrails and Bulwarks

 Guardrails or bulwarks shall be constructed in accordance with 46 CFR 32.02-10.

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- The height of rails and bulwarks shall be at least 39.5 inches.
- □ Sleeping Accommodations
 - Each licensed officer shall be provided with a separate stateroom, where practicable (46 CFR 32.40-20(a)).
 - No sleeping space may berth more than 4 persons (46 CFR 32.40-20(b)).
 - Sizing, spacing and lockers must be provided (46 CFR 32.40-20(c)-(e)).
- □ Wash spaces; toilet spaces; and shower spaces
 - Each unit must have at least 1 toilet, 1 washbasin, and 1 shower or bathtub for every 8 persons who occupy sleeping spaces that do not have private or semi-private facilities attached. All facilities shall be constructed in accordance with 46 CFR 32.40-25.
- Messrooms
 - Messrooms shall be constructed in accordance with 46 CFR 32.40-30.
- Hospital Spaces
 - Each unit carrying twelve or more persons on a voyage of more than 3 days requires a hospital space in accordance with 46 CFR 32.40-35.
- Other spaces
 - Laundry, recreation, and open deck spaces shall be provided in accordance with 46 CFR 32.40-40.

Disclaimer:

This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is not intended to nor does it impose legally-binding requirements on any party. It represents the Coast Guard's current thinking on this topic and may assist industry, mariners, the general public, and the Coast Guard, as well as other federal and state regulators, in applying statutory and regulatory requirements. You can use an alternative approach for complying with these requirements if the approach satisfies the requirements of the applicable statutes and regulations. If you want to discuss an alternative approach, you may contact the Marine Safety Center (MSC), the unit responsible for implementing this guidance.