MSC Guidelines for the Review of OSV Structural Fire Protection

Procedure Number: C1-08 Revision Date: March 30, 2012

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Purpose

To establish a procedure for reviewing structural fire protection (SFP) submitted for an Offshore Supply Vessel (OSV) regulated under 46 CFR Subchapters I or L, operating on domestic and/or international voyages.

References

- a. 46 CFR Subchapter I
- b. 46 CFR Subchapter L
- c. International Convention for the Safety of Life at Sea, 1974, and its Protocol of 1978 (SOLAS), as amended
- d. IMO MSC circular 847, Interpretations of vague expressions and other vague wording in SOLAS chapter II-2, June 12, 1998
- e. Navigation and Vessel Inspection Circular (NVIC) 9-97; Guide to Structural Fire Protection
- f. International Code for Application of Fire Test Procedures (FTP Code), IMO Resolution MSC.61(67), 1998.
- g. Marine Safety Manual (MSM), Vol. II, Chapter 9
- h. CG-522 Policy Letter 09-01, Rev.1, "Guidance on Implementation of IMO Resolution A.673(16) for U.S. Offshore Supply Vessels", dated 04/05/2010

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 C1-08.

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

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

Responsibilities

Using applicable portions of references (a) through (h), the submitter shall provide sufficient documentation and plans to indicate compliance with the applicable requirements. The submission shall be made electronically to the

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

General Guidance

- ☐ If the vessel is new and not a sister vessel, has the Application for Inspection 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 requiring Coast Guard review and/or approval submitted in triplicate? Are there any special or unusual requests involved?
- ☐ Is the vessel being reviewed by ABS under NVIC 10-82? If yes, then MSC review of structural fire protection (SFP) items is not required.
- □ Are all spaced identified and designated on the plan?
- □ Verify the applicability of Regulations. See 46 CFR 90.05 (Subchapter I), 46 CFR 125.100 (Subchapter L), and SOLAS I/2, I/3, and II-1/1.
 - □ Ensure the following drawings (items) have been received:
 - Insulation Schedule
 - Fire Protection plans of A/B class bulkheads and decks
 - Ventilation Arrangement
- □ For OSVs certificated under 46 CFR Subchapter I, verify compliance with the following:
 - Woodwork must be insulated from heated surfaces in accordance with 46 CFR 92.05-5.
 - Construction (46 CFR 92.07-10)
 - Steel construction required
 - "A" class boundaries ("A0" class boundaries In accordance with the FTP Code, Annex 2, "Products which may be installed without testing and /or approval", must be 4 mm thick steel while "A0" class boundaries in accordance with NVIC 9-97 must be 3 mm thick steel).
 - Boundary bulkheads

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- Stair towers and doors per 46 CFR 92.07-10(d)(4), and 92.07-10(g)
- Materials and miscellaneous items per 46 CFR 92.07-10(d)(5) through (9), and 92.07-10(g).
- □ Note that compliance with SOLAS using the IC method, as defined in SOLAS II-2/42, is an equivalent standard to the SFP requirements of Subchapter I (46 CFR 92.07-1(c))
- □ For OSVs certificated under 46 CFR Subchapter L, verify compliance with the following:
 - General fire protection (46 CFR 127.220)
 - Exhausts of engines, galley uptakes, and similar sources of ignition kept clear of and insulated from other combustibles
 - Paint lockers and similar compartments constructed of steel
 - A-60 bulkheads around emergency generating room or other spaces with vital components of emergency power source, if adjacent to spaces containing ship service generators
- □ For OSVs certificated under SOLAS (OSVs over 500GT INT), verify compliance with the following:
 - For OSVs on international voyages, the SFP requirements of SOLAS, Ch. II-2 apply. Note the diagrams and discussions in reference (d) for acceptable arrangements. Verify compliance with the following SOLAS II-2 regulatory citations:

Regulation Title

- 42 Structure
 - 1 steel construction
 - 2. 3 aluminum structures
 - 5 method determination
- Bulkheads within the accommodation and service spaces
 - 2-4 bulkhead construction
- 44 Fire integrity of bulkheads and decks
 - 1, 2 minimum fire integrity
 - Table 44.1: bulkheads
 - Table 44.2: decks
- Protection of stairways and lift trunks in accommodation spaces, service spaces and control stations
 - stairways and doors, relative to deck penetration
- 47 Doors in fire-resisting divisions

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- door fire integrity and construction; doors in bulkheads bounding Category A machinery spaces must be gas-tight and selfclosing.
- 48 Ventilation systems → II-2/16 (except para. 8)
- 16 1 duct material and sizing
 - 3, 4 duct passage limitations
- 50 Details of construction
- 54 Special requirements for ships carrying dangerous goods
- □ For OSVs on international voyages and with keel-laying dates after July 1, 1998, compliance with the FTP Code, as cited within SOLAS, is mandatory. In particular, any SFP arrangements that deviate from specified SOLAS construction standards are acceptable only if the alternative arrangement is proven to meet the FTP Code.
- □ For OSVs certificated under IMO RES A.673(16), verify compliance with the following:
 - Reference (h) Part 3.2.2: The doors, windows, and any other openings in a rated bulkhead must meet the rating of that bulkhead. This requirement applies only for flammable and safety hazard products. See reference (h).

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, you may contact the MSC, the unit responsible for implementing this guidance.