

# USCG MARINE SAFETY CENTER BULLETIN

BULLETIN 04-16 June 20, 2016

### Submittal of Documents to MSC for Review per 46 CFR Subchapter M

#### **Discussion**

The recently published regulations in Subchapter M may require some towing vessel owners, managing operators, third party organizations, classification societies, and other marine industry personnel to submit information to the Marine Safety Center (MSC). This bulletin provides guidance for submission of drawings, supporting calculations, and supplementary documentation to the MSC.

#### <u>Submittal</u>

The MSC offers two options for submittal: conventional mail or electronic submission through our e-mail address <u>msc@uscg.mil</u>. Detailed procedures, including MSC's physical address, acceptable media, required information, and electronic file size limits can be found in Marine Safety Center Information Bulletins 01-15 and 03-16, which are available on our webpage at: <u>http://www.uscg.mil/hq/msc/</u>.

## Please note that as of April 1, 2016, we are unable to receive emails containing .zip file attachments.

#### MSC Review for New and Existing Vessels

The regulations in Subchapter M mandate MSC review of the following items for both new and existing vessels:

- 1. Equivalents
- 2. Alternate design or operational considerations
- 3. Deviations from structural design standards

In addition, Coast Guard Policy provides MSC the authority to make all major conversion determinations.

Enclosure (1) identifies the minimum information required to be submitted to the MSC in support of the above requests.

#### **Design Verification for New Vessels**

Vessels with keel laid dates or at similar stages of construction on or after July 20, 2017, will be required to submit sufficient plans, drawings, schematics, calculations, etc. to one of the individuals or entities listed in 46 CFR Table 144.140, in order to demonstrate compliance with the appropriate design standards.

If the owner or managing operator chooses the Coast Guard option, the MSC will follow existing processes while conducting design verification. The most current information, including system specific Plan Review Guides, can be found on our Homeport site: <u>https://homeport.uscg.mil/msc</u>. Additional guidance may be provided, as needed, to address future concerns.

Owners or managing operators who choose to conduct design verification using a registered professional engineer or authorized classification society may wish to contact the individual or organization conducting the review for their specific submission details.

Please contact us at (202) 795-6729 with questions concerning the content of this circular.

J. W. MAUGER Captain, U. S. Coast Guard Commanding Officer

Enclosure: (1) Minimum Content Requirements for Submission to MSC

Authority	Cite	Description	<b>Required Submittal Content</b>
Equivalents	46 CFR 136.115(a)	Alternative solutions to requirements or standards <sup>1</sup> .	<ol> <li>Comparison analysis which clearly reflects the current standard and the suggested alternative including technical specifications. The analysis must demonstrate that the proposed alternative provides a level of safety equivalent to that intended by regulation.</li> <li>Engineering analysis which includes risk-based and/or performance methodologies to justify the equivalency.</li> </ol>
Alternate Design or Operational Consideration	46 CFR 143.210	Machinery or electrical systems of a novel design, unusual form, or special material (i.e., LNG-as-fuel, Li-ion battery propulsion, etc.)	<ol> <li>Systematic analysis, based on engineering principles, that the machinery or electrical system provides an equivalent level of safety as would be provided by meeting the existing rule/regulation.</li> </ol>
Deviations from Structural Design Standards	46 CFR 144.205(d)	Any use of a design standard not included in the regulation or incorporated by reference.	<ol> <li>Vessel design details.</li> <li>Area of intended operation.</li> <li>Detailed justification for deviation from required design standards.</li> </ol>
Major Conversion Determinations	CG policy grants MSC authority to conduct all formal major conversion determinations.	<ul> <li>As defined in 46 CFR 136.110 a major conversion means a conversion of a vessel that meets any of the following:</li> <li>1. Substantially changes the dimension or carrying capacity of the vessel.</li> <li>2. Changes the type of vessel.</li> <li>3. Substantially prolongs the life of the vessel.</li> <li>4. Otherwise changes the vessel in such a way that it becomes a new vessel.</li> </ul>	<ol> <li>Outboard profile</li> <li>General Arrangements before and after proposed alterations</li> <li>Estimated weight changes</li> <li>Detailed description of the proposed alterations</li> </ol>

1. Equivalents are not waivers or exemptions from requirements or standards. Individuals seeking departures from written requirements should contact the local OCMI.