




16711/Serial No. 1569  
CG-CVC Policy Letter 18-04  
April 3, 2018

From:   
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To: Distribution

Subj: GUIDANCE ON IMPLEMENTATION OF NEW STANDARDS FOR FIRE  
PROTECTION, DETECTION, AND EXTINGUISHING EQUIPMENT

Ref: (a) "Harmonization of Standards for Fire Protection, Detection, and Extinguishing  
Equipment," 81 Fed. Reg. 48220-48303, July 22, 2016  
(b) National Fire Protection Association (NFPA) 10; Standard for Portable Fire  
Extinguishers (2010 Edition)  
(c) "Harmonization of Fire Protection Equipment Standards for Towing Vessels," 83  
Fed. Reg. 8175-8181, February 26, 2018

1. PURPOSE. This policy letter provides information and guidance to the Officer(s) in Charge, Marine Inspection (OCMI) on recent changes to regulatory requirements for fire protection, detection and extinguishing equipment used on inspected and uninspected vessels, Outer Continental Shelf facilities, deepwater ports and mobile offshore drilling units per reference (a).
2. DIRECTIVES AFFECTED. None.
3. BACKGROUND. On July 22, 2016, the Coast Guard published reference (a), harmonizing fire protection, detection, and extinguishing equipment regulations with industry consensus standards including reference (b). This change affects all inspected and uninspected vessels. Effective with this rule, the Coast Guard updated its approval specifications for fire extinguishers from the old weight-based system to a performance-based system. Additionally, the Coast Guard changed the approval standards for fire detection and alarm systems, and added or changed other firefighting equipment and system standards including spanner wrenches for certain small passenger vessels. **This rule does not affect fixed fire extinguishing systems including carbon dioxide (CO2). All mention of extinguishers in this policy refers only to portable or semi-portable fire extinguishing equipment. This policy is not applicable to foreign vessels subject to SOLAS.**
4. DISCUSSION.
  - a. Upon adoption of reference (b), additional requirements were imposed regarding fire extinguishers including monthly inspection and certification of service providers when performing annual maintenance on re-chargeable extinguishers. A vast majority of fire

extinguishers on board vessels currently meet the requirements for the new performance-based rating system. Extinguishers that do not meet the standard are grandfathered, as discussed in the next section. This rule in many cases also reduces the number of spare extinguishers required to be carried onboard vessels.

- b. Grandfathering: Reference (a) included grandfathering provisions for fire extinguishers on vessels contracted for prior to August 22, 2016 – except vessels inspected in accordance with 46 CFR subchapter H, which are grandfathered if contracted for prior to January 18, 2017. New vessels **contracted** for, on, or after these dates must meet the updated standards put in place by reference (a).

On existing vessels, built or contracted for prior to August 22, 2016, previously approved extinguishers may be retained through the extinguishers' serviceable life<sup>1</sup>. However, once the extinguisher requires replacement, or is voluntarily replaced, the extinguisher must meet the appropriate performance rating type and size specified in the applicable subchapter tables contained in 33 or 46 CFR. For vessels inspected in accordance with 46 CFR subchapter H, the applicability date is January 18, 2017.

While reference (a) did not include a specific grandfathering provision for vessels inspected under 46 CFR subchapters R (nautical school vessels) and T (small passenger vessels), these vessels will be allowed to retain previously approved existing extinguishers through their serviceable life consistent with other inspected vessels.

- c. 46 CFR subchapter M (towing vessels): On February 26, 2018, the USCG published an interim final rule (IFR) to update Subchapter M, reference (c). This IFR updated the approval specifications for fire extinguishers from the old weight-based system to a performance-based system and incorporated NFPA 10 (2010 Edition). The OCMI, or TPO for TSMS vessels, should use the crosswalk in enclosure (1) to verify equivalency.
- d. Floating OCS Facilities (FOF): FOF's should follow 46 CFR 107.235 for the servicing of portable fire extinguishers and semi-portable fire extinguishers. Approved equipment is to be maintained per the manufacturer's instruction. All USCG Type Approved portable and semi-portable fire extinguishers have manufacturer's instructions on the label that the extinguisher is to be inspected and maintained in accordance with NFPA 10. This labeling is a condition of the listing with a USCG Recognized Laboratory. USCG Type Approval of portable fire extinguishers and semi-portable fire extinguishers equipment is conditional on its listing by a USCG Recognized Laboratory. Failure to adhere to the listing would invalidate the listing and therefore invalidate the Type Approval.
- e. Recreational Vessels: With the adoption of reference (b), certain requirements were unintentionally applied to recreational vessels. The Coast Guard is moving to correct this

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<sup>1</sup> For re-chargeable type extinguishers, this could be indefinite as long as the extinguisher meets the requirements of NFPA 10. For non-rechargeable extinguishers, the maximum service life is 12 years.

through a rulemaking. Until that rulemaking process concludes, the Coast Guard will not enforce the inspection, recordkeeping, maintenance, and recharging requirements of reference (b) against recreational vessels.

- f. Spanner Wrenches on Small Passenger Vessels: Reference (a) requires spanner wrenches on subchapter T and K vessels that also carry 1.5 inch fire hoses. There should be one wrench for every hydrant station onboard. This is applicable as of February 18, 2017.

5. ACTION.

- a. Compliance: As the intent in promulgating reference (a) was primarily to align with existing industry standards, and not to address a safety hazard, compliance should be oriented towards outreach and education. Nonetheless, an initial verification, normally in conjunction with the next scheduled inspection and/or examination, should be made to determine the status of extinguishers on vessels (i.e. if extinguishers onboard already meet minimum performance rating or, if not, may be grandfathered); this may be accomplished by direct verification from a marine inspector or examiner, or reviewing third party reports. The vessel owner or operator may also choose to submit a report indicating the existing status of extinguishers to aid compliance and request a reduction in spares. After initial verification, marine inspectors and examiners should periodically verify extinguishers in the same manner as is appropriate for the scope of the inspection and/or examination but with particular attention to grandfathered extinguishers. It is anticipated that that full compliance may take many years to accomplish as grandfathered extinguishers are phased out and vessel operators are educated on reference (b) requirements. Long-term continued engagement with industry and spot-checking extinguishers during future inspections and/or examinations will be critical to ensure compliance.
  - b. Certificate of Inspection (COI) and Documentation Requirements: Marine Information for Safety and Law Enforcement (MISLE) was updated to allow use of the performance rating nomenclature (2-A, 40-B, 20-B:C etc.) as a drop down selection for fire extinguishers. OCMI's are encouraged to use enclosure (2) for updating COI's. OCMI's may use others options for amending COI's that better suit their fleet of responsibility.
  - c. Outreach: OCMI's should engage with vessel owners and operators in their zone to ensure awareness of references (a) and (b) and this policy. To aid compliance and outreach, enclosure (1) provides a crosswalk for all CFR subchapters outlining the change from weight-based to performance-based rating. Enclosure (3) provides a compliance guide for marine inspectors and examiners.
6. ENFORCEMENT. As the risk associated with non-compliance is considered to be generally low, efforts should initially be oriented towards education. It is anticipated and excepted that full compliance may take many years to accomplish as grandfathered extinguishers are phased out and vessel operators are educated and trained on requirements in references (a)

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and (b). After initial engagement, educational efforts, and appropriate compliance time as determined by the OCMI, the requirements of reference (b) and carriage of performance rated extinguishers meeting the minimum size standards contained in current regulation should be enforced using appropriate deficiencies or other enforcement options. It is recommended that compliance associated with spanner wrenches, should occur on the following inspection after the next scheduled inspection to allow the opportunity for marine inspectors to educate owners and operators, providing time for them to come into compliance.

5. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS. Environmental considerations were examined in the development of this Instruction and have been determined to be not applicable.
6. DISCLAIMER. This policy letter guidance is neither a substitute for applicable legal requirements, nor a rule. It is not intended 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. An alternative approach may be used 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 are not required to do so), you may contact the Coast Guard Office of Commercial Vessel Compliance (CG-CVC) who is responsible for implementing this guidance.
7. QUESTIONS. Questions concerning this policy letter and guidance should be directed to the Office of Commercial Vessel Compliance, COMDT (CG-CVC), Domestic Compliance Division at [CG-CVC-1@uscg.mil](mailto:CG-CVC-1@uscg.mil). This policy letter and other domestic vessel policy documents are posted on the CG-CVC website at <http://www.dco.uscg.mil/Our-Organization/Assistant-Commandant-for-Prevention-Policy-CG-5P/Inspections-Compliance-CG-5PC-/Commercial-Vessel-Compliance/CG-CVC-Policy-Letters/>.

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Enclosure: (1) Crosswalk: Weight-Based Rating versus Performance-Based Rating  
(2) MISLE Compliance Guide  
(3) Marine Inspector and Examiner Compliance Guide

Crosswalk: Weight-Based Rating versus Performance-Based Rating**46 CFR 25.30 (Subchapter C) Motorboats**

Motorboat size	Old	New	With no fixed fire extinguishing System	With a fixed fire extinguishing system
Motorboats under 16ft	B-I	5-B	1	0
Motorboats 16ft-26ft	B-I	5-B	1	0
Motorboats 26ft-40ft	B-I	5-B	2	1
Motorboats 40ft-65ft	B-I	5-B	3	2

1 One B-II (20-B) hand portable fire extinguisher may be substituted for two B-I (5-B) hand portable fire extinguishers.

**46 CFR 25.30 (Subchapter C) Motorvessels**

Motor Vessel Size or Space / Area	Old	New	Quantity / Location
Motor Vessels with a gross tonnage not over 50	B-II	20-B	1
... over 50 and not over 100	B-II	20-B	2
... over 100 and not over 500	B-II	20-B	3
... over 500 and not over 1000	B-II	20-B	6
... over 1000	B-II	20-B	8
(Additional) for a motor vessel machinery space	B-II	20-B	1 for each 1,000 B. H. P. of the main engines or fraction thereof. Not more than 6.
(Additional) for motor vessels over 300 gross tons	B-III	160-B	1 in the machinery space, unless a fixed-fire extinguishing system is installed.

**46 CFR 28.160 (Subchapter C) Commercial Fishing**

Space / Area Type	Old	New	Quantity / Location
Safety areas, communicating corridors	A-II	2-A	1 in each main corridor not more than 150 feet (49.2 meters) apart. (May be located in stairways.)
Pilothouse	C-I	20-B:C	2 in vicinity of exit.
Service spaces, galleys	B-II or C-II	40-B:C	1 for each 2,500 square feet (269.1 sq. meters) or fraction thereof suitable for hazards involved.
Paint lockers	B-II	40-B	1 outside space in vicinity of exit.
Accessible baggage and storerooms	A-II	2-A	1 for each 2,500 square feet (269.1 sq. meters) or fraction thereof located in the vicinity of exits, either inside or outside the spaces.
Workshops and similar spaces	A-II	2-A	1 outside the space in vicinity of exit.
Machinery spaces; Internal combustion propelling machinery	B-II	40-B:C	1 for each 1,000 brake horsepower or fraction thereof but not less than 2 nor more than 6.
Electric propulsion motors or generator unit of open type	C-II	40-B:C	1 for each propulsion motor generator unit.
Auxiliary spaces	B-II	40-B:C	1 outside the space in the vicinity of exit.
Internal combustion machinery	B-II	40-B:C	1 outside the space in the vicinity of exit.
Electric emergency motors or generators	C-II	40-B:C	1 outside the space in the vicinity of exit.

NOTE: This document is intended for reference purposes only and is not an exact replica of the regulation text but is modified to best convey the information. Consult the applicable regulation prior to any enforcement action.

Encl (1)

Crosswalk: Weight-Based Rating versus Performance-Based Rating

**46 CFR 34.50 (Subchapter D) Tank Ships**

Space / Area Type	Old	New	Quantity / Location
<b>Safety Areas</b>			
Wheelhouse and chartroom area	C-II	20-B:C	1
Radio room	C-II	20-B:C <sup>1</sup>	1 in vicinity of exit
<b>Accommodation Areas</b>			
Staterooms, toilet spaces, public spaces, offices, etc., and associated lockers, storerooms, and pantries.	A-II or B-II	2-A	1 in vicinity of exit
<b>Service Areas</b>			
Galleys	B-II or C-II	40-B:C	1 for each 2,500 sq ft or fraction thereof
Stores areas, including paint and lamp rooms.	A-II or B-II	2-A:40-B:C	1 for each 2,500 sq ft or fraction thereof
<b>Machinery Areas<sup>2</sup></b>			
Spaces containing oil fired boilers, either main or auxiliary, or any fuel oil units subject to the discharge pressure of the fuel oil service pump.	B-II	40-B	2 required <sup>3</sup>
	B-V	160-B <sup>4</sup>	1 required
Spaces containing internal combustion or gas turbine propulsion machinery.	B-II	40-B	1 required for each 1,000 B.H.P., but not less than 2 nor more than 6 <sup>5</sup>
	B-III	120-B	1 required <sup>6 7</sup>
Auxiliary spaces containing internal combustion or gas turbine units	B-II	40-B	1 required in vicinity of exit <sup>7</sup>
Auxiliary spaces containing emergency generators.	C-II	40-B:C	1 required in vicinity of exit <sup>8</sup>
<b>Cargo Areas</b>			
Pumprooms	B-II	40-B	1 required in lower pumproom

1 Vessels not on an international voyage may substitute two 5-B:C rated extinguishers.

2 A 40-B:C must be immediately available to the service generator and main switchboard areas, and further, a 40-B:C must be conveniently located not more than 50 feet (15.25 meters) walking distance from any point in all main machinery operating spaces. These extinguishers need *not* be in addition to other required extinguishers.

3 Vessels of fewer than 1,000 GT require 1.

4 Vessels of fewer than 1,000 GT may substitute 1 120-B:C.

5 Only 1 required for vessels under 65 ft in length.

6 If an oil-burning donkey boiler is fitted in the space, the 160-B:C previously required for the protection of the boiler may be substituted. Not required where a fixed carbon dioxide system is installed.

7 Not required on vessels of fewer than 300 GT if the fuel has a flashpoint higher than 110 °F.

8 Not required on vessels of fewer than 300 GT.

**10% rounded up spares are required for all 2-A and 40-B:C extinguishers.**

Crosswalk: Weight-Based Rating versus Performance-Based Rating

**46 CFR 34.50 (Subchapter D) Tank Barges**

Space / Area Type	Old	New	Quantity / Location
<b>Accommodation Areas</b>			
Staterooms, toilet spaces, public spaces, offices, etc., and associated lockers, storerooms, and pantries.	A-II or B-II	2-A	1 required in the vicinity of the exit
<b>Service Areas</b>			
Galleys	B-II or C-II	40-B:C	1 for each 2,500 sq ft or fraction thereof
<b>Machinery Areas<sup>2</sup></b>			
Spaces containing oil fired boilers, either main or auxiliary, or any fuel oil units subject to the discharge pressure of the fuel oil service pump.	B-II	40-B	2 required <sup>12</sup>
Auxiliary spaces containing internal combustion or gas turbine units	B-II	40-B	1 required in vicinity of exit <sup>7,9,12</sup>
<b>Cargo Areas</b>			
Pumprooms	B-II	40-B	1 required in lower pumproom <sup>9,11</sup>
Cargo tank area	B-II	40-B	2 required <sup>10,12,13</sup>
	B-V	160-B	1 required <sup>9,11</sup>

1 Vessels not on an international voyage may substitute two 5-B:C rated extinguishers.

2 A 40-B:C must be immediately available to the service generator and main switchboard areas, and further, a 40-B:C must be conveniently located not more than 50 feet (15.25 meters) walking distance from any point in all main machinery operating spaces. These extinguishers need *not* be in addition to other required extinguishers.

3 Vessels of fewer than 1,000 GT require 1.

4 Vessels of fewer than 1,000 GT may substitute 1 120-B:C.

5 Only 1 required for vessels under 65 ft in length.

6 If an oil-burning donkey boiler is fitted in the space, the 160-B:C previously required for the protection of the boiler may be substituted. Not required where a fixed carbon dioxide system is installed.

7 Not required on vessels of fewer than 300 GT if the fuel has a flashpoint higher than 110 °F.

8 Not required on vessels of fewer than 300 GT.

9 Not required if fixed system installed.

10 If no cargo pump on barge, only one 40-B:C required.

11 Manned barges of 100 GT and over only.

12 Not required on unmanned barges except during the transfer of cargo, or operation of barge machinery or boilers when the barge is not underway.

13 An extinguisher brought on to unmanned barges during the transfer of cargo, or operation of barge machinery or boilers does not have to be Coast Guard approved, provided it is approved by a nationally recognized testing laboratory (NRTL) in accordance with 29 CFR 1910.7.

**10% rounded up spares are required for all 2-A and 40-B:C extinguishers.**

Crosswalk: Weight-Based Rating versus Performance-Based Rating**46 CFR 76.50 (Subchapter H) Passenger Vessels**

Space / Area Type	Old	New	Quantity / Location
<b>Safety Area<sup>1</sup></b>			
Wheelhouse or fire control room	A-II, B-II, C-II	20-B:C	1 of each classification on vessels over 1,000 gross tons. (Not required in both spaces.) (Multiple classification may be recognized.)
<b>Accommodations<sup>1</sup></b>			
Public spaces	A-II	2-A	1 for each 2,500 square feet or fraction thereof located in vicinity of exits, except that none required for spaces under 500 square feet.
<b>Service Spaces</b>			
Galleys	B-II or C-II	40-B:C	1 for each 2,500 square feet or fraction thereof suitable for hazards involved.
Main pantries	A-II	2-A	1 for each 2,500 square feet or fraction thereof located in vicinity of exits.
Motion picture booths and film lockers	C-I <sup>3</sup>	10-B:C <sup>3</sup>	1 outside in vicinity of exit.
Paint and lamp rooms	B-II	40-B	1 outside space in vicinity of exit.
Accessible baggage, mail, and specie rooms, and storerooms	A-II	2-A	1 for each 2,500 square feet or fraction thereof located in vicinity of exits, either inside or outside the spaces.
Refrigerated storerooms	A-II	2-A	1 for each 2,500 square feet or fraction thereof located in vicinity of exits, outside the spaces.
Carpenter, valet, photographic, printing shops sales rooms, etc	A-II	2-A	1 outside the space in vicinity of exit.
<b>Machinery Spaces</b>			
Oil Fired Boilers: Spaces, containing oil fired boilers, either main or auxiliary, or their fuel oil units	B-II	40-B	2 required. <sup>3</sup> 1 required. <sup>4</sup>
	B-V	160-B	1 required. <sup>4</sup>
Internal combustion or gas turbine propelling machinery spaces	B-II	40-B	1 for each 1,000 B. H. P., but not less than 2 or more than 6.
	B-III	120-B	1 required. <sup>5</sup>
Electric propulsive motors or generators of open type	C-II	40-B:C	1 for each propulsion motor or generator unit.
Auxiliary spaces, internal combustion or gas turbine	B-II	40-B	1 outside the space in vicinity of exit. <sup>6</sup>
Auxiliary spaces, electric emergency motors or generators	C-II	40-B:C	1 outside the space in vicinity of exit. <sup>6</sup>
<b>Cargo Spaces</b>			
Accessible during voyage	A-II	2-A	1 for each 1,200 square feet or fraction thereof.
Vehicular spaces (covered by sprinkler system)	B-II	40-B	1, plus 1 for each 6,000 square feet or fraction thereof.
Vehicular spaces (not covered by sprinkler system)	B-II	40-B	1, plus 1 for each 1,500 square feet or fraction thereof. <sup>7</sup>

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## Crosswalk: Weight-Based Rating versus Performance-Based Rating

- 1 In any case, on vessels of 150 feet (45.72 meters) in length and over, there must be at least two 2-A units on each passenger deck.
  - 2 For vessels on an international voyage, substitute 1 20-B:C in the vicinity of the exit.
  - 3 Vessels of less than 1,000 GT and not on an international voyage require 1.
  - 4 Vessels of less than 1,000 GT and not on an international voyage may substitute 1 160-B.
  - 5 If an oil-burning donkey boiler is fitted in the space, the 160-B previously required for the protection of the boiler room may be substituted. Not required on vessels of less than 300 GT if the fuel has a flashpoint of 110 °F or lower except those on an international voyage.
  - 6 Not required on vessels of less than 300 GT if the fuel has a flashpoint higher than 110 °F.
  - 7 Two 5-B units may be substituted for 1 20-B unit.
- 10% rounded up spares are required for all 2-A extinguishers in public spaces and 40-B:C extinguishers in cargo spaces.**

Crosswalk: Weight-Based Rating versus Performance-Based Rating

**46 CFR 95.50-10 (Subchapter I) Cargo and Miscellaneous Vessels**

Space / Area Type	Old	New	Quantity / Location
<b>Safety Areas<sup>1</sup></b>			
Communicating corridors	A-II	2-A	1 in each main corridor not more than 150 feet apart. (May be located in stairways.)
Radio room	C-I2	20-B:C	2 in vicinity of exit. <sup>2</sup>
<b>Service Spaces<sup>1</sup></b>			
Galleys	B-II or C-II	40-B:C	1 for each 2,500 square feet or fraction thereof suitable for hazards involved.
Paint and lamp rooms	B-II	40-B	1 outside space in vicinity of exit.
Accessible baggage, mail, and specie rooms, and storerooms	A-II	2-A	1 for each 2,500 square feet or fraction thereof located in vicinity of exits, either inside or outside the spaces.
Carpenter shop and similar spaces	A-II	2-A	1 outside the space in vicinity of exit.
<b>Machinery Spaces</b>			
Oil-fired boilers: Spaces containing oil-fired boilers, either main or auxiliary, or their fuel-oil units	B-II	40-B	2 required <sup>3</sup>
	B-V	160-B	1 required. <sup>4</sup>
Internal combustion or gas turbine propelling machinery spaces	B-II	40-B	1 for each 1,000 brake horsepower, but not less than 2 nor more than 6. <sup>5</sup>
	B-III	120-B	1 required. <sup>6,7</sup>
Electric propulsive motors or generators of open type	C-II	40-B:C	1 for each propulsion motor or generator unit.
<b>Auxiliary Spaces</b>			
Internal combustion or gas turbine	B-II	40-B	1 outside the space in vicinity of exit. <sup>7</sup>
Electric emergency motors or generators	C-II	40-B:C	1 outside the space in vicinity of exit. <sup>8</sup>

1 For motorboats, the total number of portable fire extinguishers required for safety areas, accommodation spaces, and service spaces must be one 20-B for motorboats of less than 50 GT and two 20-B ratings for motorboats of 50 GT or more.

2 For vessels on an international voyage, substitute one 20-C in the vicinity of the exit.

3 Vessels of less than 1,000 gross tons require one.

4 Vessels of less than 1,000 gross tons may substitute one 160-B.

5 Only one is required for motorboats.

6 If an oil-burning donkey boiler fitted in space, the 160-B previously required for the protection of the boiler may be substituted. Not required where a fixed carbon dioxide system is installed.

7 Not required on vessels of less than 300 gross tons if the fuel has a flashpoint higher than 110 °F.

8 Not required on vessels of less than 300 gross tons.

**10% rounded up spares are required for all 2-A and 40-B:C extinguishers.**

Crosswalk: Weight-Based Rating versus Performance-Based Rating

**46 CFR 108.495 (Subchapter I-A) Mobile Offshore Drilling Units**

Space / Area Type	Old	New	Quantity / Location
Wheelhouse and control room	C-I	20-B:C	2 in vicinity of exit.
Corridors	A-II	2-A	1 in each corridor not more than 150 ft (45 m) apart. (May be located in stairways.)
Radio room	C-I	10-B:C	2 in vicinity of exit.
Galleys	B-II or C-II	40-B:C	1 for each 2,500 ft <sup>2</sup> (232 m <sup>2</sup> ) or fraction thereof suitable for hazards involved.
Paint and lamp rooms	B-II	40-B	1 outside each room in vicinity of exit.
Storerooms	A-II	2-A	1 for each 2,500 ft <sup>2</sup> (232 m <sup>2</sup> ) or fraction thereof located in vicinity of exits, either inside or outside the spaces.
Work shop and similar spaces	C-II	20-B:C	1 outside each space in vicinity of an exit.
Oil-fired boilers: Spaces containing oil-fired boilers, either main or auxiliary, or their fuel oil units	B-II	40-B	2 required in each space.
Oil-fired boilers: Spaces containing oil-fired boilers, either main or auxiliary, or their fuel oil units	B-V	160-B	1 required in each space.
Internal combustion or gas turbine propelling machinery spaces	B-II	40-B	1 for each 1,000 brake horsepower but not less than 2 nor more than 6 in each space.
Internal combustion or gas turbine propelling machinery spaces	B-III	120-B	1 required in each space. See note 1.
Motors or generators of electric propelling machinery that do not have an enclosed ventilating system.	C-II	40-B:C	1 for each motor or generator.
Internal combustion engines or gas turbine	B-II	40-B	Outside the space containing engines or turbines in vicinity of exit.
Electric emergency motors or generators	C-II	40-B:C	1 outside the space containing motors or generators in vicinity of exit.
Helicopter landing decks	B-V	160-B	1 at each access route.
Helicopter fueling facilities	B-IV	160-B	1 at each fuel transfer facility. See note 2.
Drill floor	C-II	40-B:C	2 required.
Cranes with internal combustion engines	B-II	40-B:C	1 required.

1 Not required where a fixed gas extinguishing system is installed.

2 Not required where a fixed foam system is installed in accordance with § 108.489 of this subpart.\

**10% rounded up spares are required for all 2-A and 40-B:C extinguishers.**

Crosswalk: Weight-Based Rating versus Performance-Based Rating

**46 CFR 118.500 (Subchapter K) Small Passenger Vessels (> 150 Passengers or Overnight Accommodations > 49 Passengers)**

Space / Area Type	Old	New	Quantity / Location
Operating station	B-I, C-I	10-B:C	1
Machinery space	B-II, C-II	40-B:C	1 in the vicinity of the exit
Open vehicle deck	B-II	40-B	1 for every 10 vehicles
Accommodation space	A-II	2-A	1 for each 2,500 square feet or fraction thereof
Galley	B-II	40-B:C	1
Pantry, concession stand	A-II	2-A	1 in the vicinity of the exit.

1 A vehicle deck without a fixed sprinkler system and exposed to weather must have one B-II portable fire extinguisher for every five vehicles, located near an entrance to the space.

**46 CFR 132.220 (Subchapter L) Offshore Supply Vessels**

Space / Area Type	Old	New	Quantity / Location
Safety areas: Communicating passageways	A-II	2-A	1. In each main passageway, not more than 45.7 meters (150 feet) apart (permissible in stairways).
Pilothouse	C-I	20-B:C	2. In vicinity of exit.
Service spaces: Galleys	B-II or C-II	40-B:C	1. For each 230 square meters (2,500 feet <sup>2</sup> ) or fraction thereof, suitable for hazards involved.
Paint lockers	B-II	40-B	1. Outside space, in vicinity of exit.
Accessible baggage and storerooms	A-II	2-A	1. For each 230 square meters (2,500 feet <sup>2</sup> ) or fraction thereof, located in vicinity of exits, either inside or outside spaces.
Work shops and similar spaces	A-II	2-A	1. Outside space in vicinity of exit.
Machinery spaces: Internal-combustion propulsion-machinery	B-II	40-B:C	1. For each 1,000 brake horsepower, but not fewer than 2 nor more than 6.
Machinery spaces: Internal-combustion propulsion-machinery	B-III	120-B	1. Required. (1), (2)
Electric propulsion motors or generators of open type	C-II	40-B:C	1. For each propulsion motor or generator unit.
Auxiliary spaces: Internal combustion	B-II	40-B	1. Outside space in vicinity of exit. (2)
Electric motors and emergency generators	C-II	40-B:C	1. Outside space in vicinity of exit. (2)

1 Not required where a fixed gaseous fire extinguishing system is installed.

2 Not required on vessels of less than 300 GT.

**10% rounded up spares are required for all 2-A and 40-B:C extinguishers.**

Crosswalk: Weight-Based Rating versus Performance-Based Rating

**46 CFR 142.230(d)(1) (Subchapter M) Towing Vessels**

Length, feet	Old	New	Quantity	
			No fixed fire-extinguishing system in machinery space	Fixed fire-extinguishing system in machinery space
Under 26	B-I	10-B:C	1	0
26 and over, but under 40			2	1
40 and over, but not over 65			3	2

1 One 40-B:C (B-II) hand-portable fire extinguisher may be substituted for two 10-B:C (B-I) hand portable fire extinguishers. See 46 CFR 136.105 concerning vessels under 26 feet.

**46 CFR 142.230(d)(2) (Subchapter M) Towing Vessels**

Space/ Area Type	Old	New	Quantity	Gross tonnage	
				Over	Not over
Machinery Space	B-II	40-B:C	1	...	50
			2	50	100
			3	100	500
			6	500	1,000
			8	1,000	...
Engine Room	B-II	40-B:C		1 per 1,000 brake horsepower of the main engines, but not more than 6.	

Crosswalk: Weight-Based Rating versus Performance-Based Rating

**33 CFR Table 145.10(a) (Subchapter N) Outer Continental Shelf Activities**

Space / Area Type	Old	New	Quantity / Location
Communicating corridors	A-II	2-A	1 in each main corridor not more than 150 feet apart. (May be located in stairways.)
Radio room	C-II	20-B:C	1 in vicinity of exit.
Sleeping accommodations	A-II	2-A	1 in each sleeping accommodation space. (Where occupied by more than 4 persons.)
Galleys	B-II or C-II	40-B:C	1 for each 2,500 square feet or fraction thereof for hazards involved.
Storerooms	A-II	2-A	1 for each 2,500 square feet or fraction thereof located in vicinity of exits, either inside or outside of spaces.
Gas-fired boilers	B-II	40-B	2 required.
Gas-fired boilers	B-V	160-B	1 required. <sup>1</sup>
Oil-fired boilers	B-II	40-B	2 required.
Oil-fired boilers	B-V	160-B	2 required. <sup>1</sup>
Internal combustion or gas turbine engines	B-II	40-B	1 for each engine. <sup>2</sup>
Electric motors or generators of open type	C-II	40-B:C	1 for each 2 motors or generators. <sup>3</sup>

1 Not required where a fixed extinguishing system is installed.

2 When the installation is on the weather deck or open to the atmosphere at all times, then one 40-B extinguisher for every three engines is allowable.

3 Small electrical appliances, such as fans, are exempt.

Crosswalk: Weight-Based Rating versus Performance-Based Rating

**33 CFR Table 149.409 (Subchapter NN) Deepwater Ports**

Space / Area Type	Old	New	Quantity / Location
Communicating corridors	A-II	2-A	One in each main corridor or stairway not more than 150 ft apart.
Radio room	C-II	20-B:C	One outside or near each radio room exit.
Sleeping quarters	A-II	2-A	One in each sleeping space that fits more than four persons.
Galleys	B-II or CII	40-B:C	One for each 2,500 square feet or fraction thereof, for hazards involved.
Storerooms	A-II	2-A	One for each 2,500 square feet or fraction thereof, located near each exit, either inside or outside the space.
Paint room	B-II	40-B	One outside each paint room exit.
Gas-fired boilers	B-II or C-II	40-B:C	Two.
	B-V	160-B	One. <sup>1</sup>
Oil-fired boilers	B-II	40-B:C	Two.
	B-V	160-B	Two. <sup>1</sup>
Internal combustion or gas turbine engines	B-II	40-B	One for each engine. <sup>2</sup>
Open electric motors and generators	C-II	40-B:C	One for each of two motors or generators. <sup>3</sup>
Helicopter landing decks	B-V	160-B	One at each access route.
Helicopter fueling facility	B-V	160-B	One at each fuel transfer facility. <sup>4</sup>

1 Not required if a fixed system is installed.

2 If the engine is installed on a weather deck or is open to the atmosphere at all times, one 40-B extinguisher may be used for every three engines.

3 Small electrical appliances, such as fans, are exempt.

4 Not required if a fixed foam system is installed in accordance with 46 CFR 108.489.

Crosswalk: Weight-Based Rating versus Performance-Based Rating

**46 CFR 169.567(a) (Subchapter R) Nautical Schools**

Space / Area Type	Old	New	Quantity / Location
Living space and open boats	B-I	2-A	1 per 1000 cu. ft. of space
Propulsion machinery space with fixed CO <sub>2</sub> or halon system	B-I	40-B:C	1
Propulsion machinery space without fixed CO <sub>2</sub> or halon system	B-II	40-B:C	2
Galley (without fixed system)	B-II	40-B:C	1 per 500 cu. ft

10% rounded up spares are required for all 2-A extinguishers. 1 40-B:C extinguisher is required as spare.

**46 CFR 181.500 (Subchapter T) Small Passenger Vessels**

Space / Area Type	Old	New	Quantity / Location
Operating Station	B-I, C-I	10-B:C	1
Machinery Space	B-II, C-II	40-B:C	1 located just outside exit
Open Vehicle Deck	B-II	40-B	1 for every 10 vehicles
Accommodation Space	A-II	2-A	1 for each 232.3 square meters (2,500 square feet) or fraction thereof
Galley	A-II, B-II	40-B:C	1
Pantry, Concession Stand	A-II, B-II	2-A	1

1 A vehicle deck without a fixed sprinkler system and exposed to weather must have one 40-B portable fire extinguisher for every five vehicles, located near an entrance to the space.



Crosswalk: Weight-Based Rating versus Performance-Based Rating

**46 CFR 193.50 (Subchapter U) Oceanographic Research Vessels**

Space / Area Type	Old	New	Quantity / Location
Communicating corridors	A-II	2-A	1 in each main corridor not more than 150 ft apart. (May be located in stairways.)
Radio room	C-II	20-B:C	2 in vicinity of exit. <sup>2</sup>
Galleys	B-II or C-II	40-B:C	1 for each 2,500 square feet or fraction thereof suitable for hazards involved.
Paint and lamp rooms	B-II	40-B	1 outside space in vicinity of exit.
Accessible baggage, mail, and specie rooms, and storerooms	A-II	2-A	1 for each 2,500 square feet or fraction thereof located in vicinity of exits, either inside or outside the spaces.
Carpenter shop and similar spaces	A-II	2-A	1 outside the space in vicinity of exit.
Oil-fired boilers: Spaces containing oil-fired boilers, either main or auxiliary, or their fuel-oil units	B-II	40-B	2 required. <sup>3</sup>
Oil-fired boilers: Spaces containing oil-fired boilers, either main or auxiliary, or their fuel-oil units	B-V	160-B	1 required. <sup>4</sup>
Internal combustion or gas turbine propelling machinery spaces	B-II	40-B	1 for each 1,000 brake horsepower, but not less than 2 nor more than 6. <sup>5</sup>
Internal combustion or gas turbine propelling machinery spaces	B-III	120-B	1 required. <sup>6,7</sup>
Electric propulsive motors or generators of open type	C-II	40-B:C	1 for each propulsion motor or generator unit.
Internal combustion gas turbine	B-II	40-B	1 outside the space in vicinity of exit. <sup>7</sup>
Electric emergency motors or generators	C-II	40-B:C	1 outside the space in vicinity of exit. <sup>8</sup>
Chemistry laboratory or scientific laboratory	C-II	40-B:C	2 for each 300 sq ft of deck space or fraction thereof, with one (1) of each kind located in the vicinity of the exit.
Chemical storeroom	C-II	40-B:C	Same as for the chemistry laboratory.

1 For vessels on an international voyage, substitute one 40-B:C in vicinity of the exit.

2 Vessels of fewer than 1,000 GT require one.

3 Vessels of fewer than 1,000 GT may substitute one 120-B

4 Only one required for motorboats.

5 If oil burning donkey boiler fitted in space, the 160-B previously required for the protection of the boiler may be substituted. Not required where a fixed carbon dioxide system is installed.

6 Not required on vessels of fewer than 300 GT if fuel

**10% rounded up spares are required for all 2-A and 40-B:C extinguishers.**

## MISLE Compliance Guide

After initial verification of the type of extinguishers onboard, the COI should be amended using one of the methods below or another method acceptable to the OCMI. The results of the verification should be recorded within the MISLE activity Narrative. A special note should also be made in MISLE for vessels that retain grandfathered extinguishers. OCMI's may use a different method for amending a COI that best suits vessels in their fleet of responsibility. However, the methodology detailed below is intended to provide continuity between OCMI zones for vessels with grandfathered extinguishers. On some vessels, the process of transitioning from grandfathered to UL compliant extinguishers may take years and will require periodic updates to the COI.

### **Option A (UL Compliant).**

Issue the COI noting the UL ratings for the extinguishers the vessel **should ultimately have** once all grandfathered extinguishers are changed out, in accordance with current regulations. If the vessel owner chooses to retain grandfathered extinguishers, make a note in the routes and conditions section of the COI to indicate that the vessel is permitted to use existing A-II, B-II, and C-II extinguishers until replaced. Ensure to document the location, type, class and quantity of each grandfathered extinguisher in the routes and conditions section of the COI.

Example of changes to subchapter L vessel using option A:

Location	Type	Class	Quantity
Communicating Corridors	Portable	2-A	2
Pilot House	Portable	20-B:C	1
Machinery Spaces	Portable	40-B:C	3
Galley	Portable	40-B:C	1

### **Option B (CG/UL Compliant):**

Issue the COI noting the grandfathered extinguishers that are **currently onboard** in accordance with the regulations. Use the UL nomenclature (i.e. 40-B) for any extinguishers that meet the minimum size and type requirements under UL standard, but, retain the Coast Guard rating nomenclature (i.e. B-II) for any remaining grandfathered extinguishers. If the vessel has a mixture of old and new standard extinguishers in a space, retain the Coast Guard rating nomenclature for the space, until all of the extinguishers in that space meet the UL standard.

Example of changes to subchapter I vessel using option B:

Location	Type	Class	Quantity
Communicating Corridors	Portable	2-A	14
Pilot House (Radio Room)	Portable	C-II	1
Machinery Spaces	Portable	B-II	11
Machinery Spaces	Portable	C-II	3
Galley	Portable	40-B:C	1
Machinery Space	Semi-Portable	B-III	1
Paint Locker	Portable	B-II	1

Marine Inspector and Examiner Compliance Guide

Task	Action	Outcome
<p>Verify extinguisher has minimum UL rating for space it is intended to protect</p>	<p>Consult the applicable table in the inspection subchapter for each space required on the COI to have an extinguisher and compare with extinguishers' label</p> <p>(i.e. paint locker requires at least 40:B, if existing B-II is also rated 40:B or greater then extinguisher is compliant; if existing B-II is not at least 40:B then extinguisher is not complaint but may be retained by verifying installation &amp;/or manufacturing date)</p>	<p>Extinguisher has appropriate rating for space or is grandfathered: vessel is in compliance</p> <p>Extinguisher was placed in service after August 22, 2016* and does not meet minimum UL rating for space: require replacement of extinguisher with one that has appropriate UL rating</p> <p>* Or January 18, 2017 for subchapter H vessels</p>
<p>Verify NFPA 10 compliance</p> <p>(a) Monthly inspections</p> <p>(b) Annual maintenance (servicing)</p> <p>(c) Re-chargeable extinguisher maintenance performed by certified individual/company</p> <p>(d) Non-rechargeable annual maintenance limited to scope of monthly inspections; extinguishers in service for no more than 12 years after date of manufacture</p>	<p>(a) &amp; (b): review documentation &amp; procedures related to monthly/annual inspections &amp; maintenance (i.e. servicing) to ensure tasks are being performed IAW NFPA 10</p> <p>(objective evidence may be logs, tags, servicing report, or other similar record; if records or extinguishers are suspect marine inspector may witness demonstration of procedures by crew &amp;/or third party)</p> <p>(c) review records showing third party service or vessel/company personnel conducting annual maintenance are certified in accordance with NFPA 10</p> <p>(d) review records or physically inspect extinguisher to ensure non-rechargeable extinguishers are less than 12 years old from date of manufacture</p> <p>(personnel conducting maintenance on non-rechargeable need not be certified)</p>	<p>Extinguishers are inspected monthly &amp; undergoing annual maintenance by certified personnel IAW NFPA 10: vessel is in compliance</p> <p>Extinguishers are not undergoing monthly inspection: inspect all extinguishers to verify continued serviceability and require maintenance (servicing) of any suspect (or all) extinguishers as appropriate</p> <p>Extinguishers did not undergo annual maintenance: require maintenance (servicing) of all extinguishers</p> <p>Personnel conducting maintenance on rechargeable extinguishers are not certified: require maintenance on all extinguisher by certified personnel</p> <p>Non-rechargeable extinguisher more than 12 years old: require replacement</p>

NOTE: This guide is not a substitute for applicable regulations and does not cover all possible scenarios or courses of action.

Marine Inspector and Examiner Compliance Guide

Task	Action	Outcome
Verify number of spares	<p>Verify that all extinguishers of a particular type meet the UL standard based on the applicable subchapter table</p> <p>(consult applicable table for portable &amp; semi-portable extinguishers to determine required compliment of spares; generally will require 10% of 2-A and 10% of 40-B and/or 40-B:C)</p>	<p>If all extinguishers of a particular type (i.e. 2-A or 40-B:C) meet the minimum UL rating; then the number of extinguishers kept as spares may be reduced to 10% of the total required by the applicable subchapter table</p> <p>If vessel keeps grandfathered extinguishers (i.e. B-IIIs are only rated 10:B, but, 40:B is required): must maintain 50% spares</p> <p>(If vessel is on an international route and subject to SOLAS, then number of spares must be in accordance with SOLAS)</p>
Verify small passenger vessels (subchapter K & T) carrying appropriate spanner wrenches	<p>Ensure spanner wrenches are onboard</p> <p>(appropriate number, size, and dedicated to each fire hydrant; material is not specified by regulation)</p>	<p>Vessel has appropriate spanner wrench: vessel is in compliance</p> <p>Vessel does not have appropriate spanner wrench(s): require vessel to obtain spanner wrench</p>