

Commandant U.S. Coast Guard

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16714 CG-ENG Policy Letter 05-25

December 12, 2025

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From: J. R. Doherty, CAPT

COMDT (CG-ENG)

To: Distribution

Subj: USCG ACCEPTANCE OF ALUMINUM FLAMMABLE LIQUID STORAGE CABINETS ON WEATHER DECKS OF INSPECTED TOWING VESSELS

Ref: (a) 46 Code of Federal Regulations (CFR), Subchapter M – Towing Vessels

(b) 46 Code of Federal Regulations (CFR) §142.225

(c) UL 1275 Standard for Safety for Flammable Liquid Storage Cabinets

(d) FM Approval Standard 6050 Standard for Storage Cabinets

(e) NFPA 30: Flammable and Combustible Liquids Code

1. <u>PURPOSE</u>. This policy letter provides guidance for USCG acceptance of aluminum flammable liquid storage cabinets on weather decks of Inspected Towing Vessels (ITVs) on domestic voyages only per 46 CFR § 136.115, as an equivalent level of safety to the requirements of Reference (b).

2. BACKGROUND.

- a. The effective date of the final rule for inspection of towing vessel was July 20, 2016. This rule established safety regulations governing inspection, standards, and safety management systems of towing vessels under Reference (a). As part of the new regulations, requirements for fire protection were established under 46 CFR § 142.
- b. One of the new requirements in 46 CFR § 142 addresses the storage of flammable or combustible products onboard ITVs. Reference (b) requires the use of a designated storage room or cabinet for paints, coatings, or other flammable or combustible products. If a dedicated storage cabinet is used, it must be a flammable liquid storage cabinet that satisfies either References (c) or (d). Another suitable steel container that provides an equivalent level of safety to these standards is also acceptable. At the time of writing this policy letter, all storage cabinets approved in accordance with References (c) and (d) are constructed of steel.
- c. Prior to the publication of Reference (a), some towing vessels installed aluminum storage cabinets on deck to store flammable liquids. After the implementation of Reference (a), vessels with existing aluminum storage cabinets were allowed to continue using them until they were no longer serviceable in accordance with the OCMI Guidance on Special Consideration for 46 CFR Subchapter M Vessels (CVC-WI-010(3)). According to the

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guidance, once an aluminum storage cabinet becomes unserviceable, it must be replaced with suitable steel cabinets in accordance with Reference (b).

d. Owners, operators, and industry representatives have been utilizing approved steel storage cabinets installed on deck and have noted rapid deterioration when exposed to the elements, such as weather, salt spray, high heat, and humidity. It was reported that in as little as two years, steel storage cabinets deteriorated to the point of compromised fire protection integrity. Concern over the increased financial burden of replacing these cabinets at frequent intervals was raised and requests were made to allow aluminum storage cabinets to be deemed as meeting an equivalent level of safety to Reference (b) in accordance with 46 CFR § 136.115.

3. DISCUSSION.

- a. Storage cabinets approved per References (c) and (d) are designed and constructed to be used indoors and to protect the contents from external fires or ignition sources; they are not designed or intended to contain a fire. Additionally, per reference (e), the 10-minute fire test used for approval is based on the estimated time for the space the cabinet is in to become seriously involved in a fire and, thus, is considered a measure of the time for occupants to evacuate the area. This time limit is based on standards for shoreside buildings, not for vessels. It has been determined, based on experience with enforcement of the regulations in Reference (b) that the same time restraints may not always be appropriate for vessels.
- b. In general, the fire protection performance of aluminum is less than that of steel due to material properties such as thermal conductivity, melting point, and yield strength. While this reduced performance introduces increased risk, additional safety measures can be implemented for aluminum storage cabinets that would satisfy the regulation's intent to protect the cabinet contents from external fires or ignition sources and to give enough time for crewmembers to safely evacuate.
- c. Enclosure (1) outlines safety measures for construction and arrangement of aluminum storage cabinets used to store flammable or combustible liquids **on deck**. When these safety measures are in place, fire risk is reduced by lowering the chance the storage cabinet and its contents are exposed to flame or ignition hazards while providing a cabinet that can better withstand expected exposure to the elements, like weather and salt spray.
- d. Reference (b) requires steel cabinets for storing flammable or combustible products. Based on the above discussion, it is determined that, as an alternative to the steel storage cabinet meeting Reference (b), the use of a cabinet meeting the requirements found in Enclosure (1) would provide an equivalent level of safety for the storage of flammable or combustible liquids and reduce the financial burden on owners and operators due to increased deterioration of steel cabinets on deck in certain climates, and the associated costs of repeated cabinet replacement.

¹ SFPE Handbook of Fire Protection Engineering, 5th edition; and NFPA 921-2017, *Guide for Fire and Explosion Investigations*.

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4. ACTION.

- a. USCG Headquarters Units and Offices, Districts, and Sector Commanders may use this policy letter to accept aluminum flammable storage cabinets on ITVs on domestic voyages only in lieu of the steel flammable storage cabinets in Reference (b), provided they are installed on the weather deck and meet all the requirements in Enclosure (1).
- b. The installation and construction of the cabinet must be approved to the satisfaction of the local OCMI.
- c. Requests for equivalents outside of this Enclosure (1) criteria must be submitted to Commandant (CG-ENG) for approval.
- 5. <u>DISCLAIMER</u>. This policy is neither a substitute for applicable legal requirements, nor is it itself a rule. It is neither intended to nor does it impose legally binding requirements on any party. It represents the USCG's current position on this topic and may assist industry, mariners, the public, and the Coast Guard, as well as other federal and state regulators, in applying statutory and regulatory requirements. Alternative approaches for complying with these requirements may be considered if they satisfy the requirements of the applicable statutes and regulations.
- 6. <u>CHANGES</u>. This policy letter will be posted on the web at <u>CG-ENG Policy (uscg.mil)</u> (https://www.dco.uscg.mil/CG-ENG/Policy). Changes to this policy will be issued as necessary.
- 7. <u>QUESTIONS</u>. Any questions concerning this policy should be directed to Commandant (CG-ENG), Commercial Regulations and Standards Directorate, Office of Design and Engineering Standards at <u>CGENG@useg.mil</u>.

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Enclosure: (1) Design Guidance for Aluminum Flammable Liquid Storage Cabinets

Distribution: Commandant, Commercial Vessel Compliance COMDT (CG-CVC)

All Sectors/MSU/MSDs (spi)

Towing Vessel NCOE

Coast Guard Marine Safety Center (CG MSC)

Aluminum Flammable Liquid Storage Cabinets Equivalency

The following provides criteria¹ on the construction and arrangement of aluminum storage cabinets for the storage of flammable or combustible products on the weather deck of Inspected Towing Vessels (ITVs) on domestic voyages only per 46 CFR § 136.115, in lieu of the requirements in 46 CFR § 142.225. This is not an approved equivalency for vessels where SOLAS standards are required.

A storage cabinet constructed of aluminum may be used on weather decks of applicable vessels if the following provisions are met:

- a. It should be as far as practicable² from machinery spaces, exhaust stacks, or means of escape;
- b. It must be stowed away from ignition sources;
- c. It must be made of a minimum of 1/4 inch aluminum (applies to frame/shell only);
- d. It must be of welded construction;
- e. It must have a door equipped with a latching mechanism and a door sill raised at least 2 inches above the bottom of the cabinet to retain spilled liquid within the cabinet;
- f. It must have a maximum size of 30 cubic feet;
- g. It must be permanently marked "FLAMMABLE, KEEP FIRE AWAY" in a contrasting color with letters not less than 2 inches located on the upper portion of the cabinet's front door(s) or frame;
- h. It must meet the other requirements in § 142.225 (i.e., secured to the vessel and have additional 40-B portable fire extinguisher near³ the cabinet.); and
- i. It must be repaired or replaced with a storage cabinet constructed and arranged in accordance with this Equivalency or a storage cabinet meeting § 142.225, if determined unserviceable by the local OCMI.
- j. It only contains the amounts of flammable or combustible products necessary for the vessel's mission with a maximum of 120 gallons (454 liters) per cabinet.

¹ The equivalency criteria are developed generally based on the requirements for flammable liquids storage cabinets as outlined in NFPA 30, *Flammable and Combustible Liquids Code*.

² Aluminum storage cabinets should be located away from high-risk spaces. However, when restrictions due to vessel size and vessel operation exist, considerations such as additional fire safety measures and fire boundaries may be taken into account in determining the locations of the aluminum storage cabinets.

³ Per NFPA 10, *Standards for Portable Fire Extinguishers*, (incorporated by reference per 46 CFR 136.112) a 40-B portable fire extinguisher for a Class-B fire (flammable and combustible liquids) must be placed within a maximum travel distance of **30 feet**. This path must account for any obstacles, walls, or other walking restrictions.