U.S. COAST GUARD MARINE SAFETY CENTER PLAN REVIEW GUIDELINE



REVIEW OF CO2 BOTTLE STORAGE

Procedure Number: SOLAS-03 Revision Date: April 21, 2022

J. B. Bybee, CDR, Chief, Hull Division

Purpose

This Plan Review Guideline (PRG) addresses the use and storage requirements for single CO_2 bottles used in accommodation areas.

Contact Information

If you have any questions or comments concerning this document, please contact the Marine Safety Center (MSC) by e-mail or phone. Please refer to Procedure Number SOLAS-03.

E-mail: <u>msc@uscg.mil</u> Phone: 202-795-6730 Website: <u>www.dco.uscg.mil/msc</u>

1. Applicability

This PRG is applicable to SOLAS passenger ships carrying more than 36 passengers.

2. References

SOLAS II-2/9.7.5.1.4 (previously II-2/32.1.9.4)

"Remote control arrangements for shutting off the exhaust fans and supply fans, for operating the fire dampers mentioned in paragraph 7.5.1.2 and for operating the fire-extinguishing system, which shall be placed in a position close to the entrance to the galley. Where a multi-branch system is installed, a remote means located with the above controls shall be provided to close all branches exhausting through the same main duct before an extinguishing medium is released into the system."

3. Background

While remote controls for securing ventilation and operating the fire-extinguishing system are typically in accordance with the above regulation, there are no provisions that specifically address the storage of CO_2 bottles used in galley exhaust duct extinguishing systems. These bottles typically contain smaller volumes of CO_2 than those used for flooding entire spaces. Accordingly, the stowage requirements in II-2/10.4.3 are typically applied only to banks of CO_2 bottles that are stored in the same space. Recently, many vessels have been found to have galley exhaust duct CO_2 bottles stowed within accommodation spaces, or in lockers without ventilation. These bottles pose a significant hazard to personnel in the immediate vicinity of the bottle.

4. Guidance

Single CO₂ bottles used in galley duct extinguishing and beverage distribution systems should not be stowed in accommodation areas, and should be arranged so that rapid loss of the CO₂ charge will not pose a threat to persons nearby. As far as practicable, CO₂ bottle stowage shall be in accordance with II-2/10.4.3.

5. 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 MSC, the unit responsible for implementing this guidance.