

U.S. Department of
Homeland Security

**United States
Coast Guard**



Commandant
United States Coast Guard
Marine Safety Center

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16451
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Distribution to Coast Guard Accepted Independent Laboratories

- Ref: (a) National Fire Protection Association (NFPA) 70, National Electrical Code Articles 500-505
(b) International Electrotechnical Commission (IEC) 60079-14: Electrical Installations Design, Selection and Erection
(c) International Electrotechnical Commission (IEC) 60079-17: Electrical Installations Inspection and Maintenance

Dear Sir/Ma'am,

The U.S. Coast Guard (USCG) has received numerous ballast water management system (BWMS) type approval applications intended for installation in hazardous areas onboard commercial vessels. In some of these applications, the USCG Accepted Independent Laboratory (IL) did not verify or adequately document the hazardous area classification to which the BWMS is rated. This letter provides amplifying guidance to the ILs when documenting BWMS acceptability for installation in hazardous locations, as applicable, for U.S. and foreign flag vessels.

The terms and classifications for hazardous areas, as defined by references (a) through (c), differ in terminology, scope, and application. It is the responsibility of the IL and manufacturer to ensure they are referencing the correct standard and definitions for their specific regulatory industry, and geographic requirements. The terms used within this letter are consistent with references (b) and (c), as they are the internationally recognized standard; however, the terms used in reference (a) are equally acceptable. As per 46 CFR 162.060-20(d), a BWMS must comply with all pertaining regulations outlined in 46 CFR 111.105, or its foreign equivalent. As such, the hazardous area classification is required to be completed prior to the selection of electrical equipment for use in hazardous locations.

The ILs must certify that all components installed in hazardous locations are safe for use and meet the required area classification designation, which includes the zone, gas/dust group, temperature-code, and installation limitations. ILs and manufacturers must ensure the Operation, Maintenance, and Safety Manual (OMSM) clearly describes the verified intended locations and conditions for the BWMS, as required by 46 CFR 162.060-38(3)(v). To meet this requirement, *ILs should include a register in the Type Approval submittal* which lists all components intended for hazardous environments, along with their respective manufacturer details and Ex-certificates. An example register template is provided in Enclosure (1).

Installers must confirm that the equipment meets or exceeds the required Equipment Protection Level (EPL), zone classification, equipment group, and maximum surface temperature for the intended location. It is important to note that zoning alone does not account for the full consequences of an explosion. References (b) and (c) mandate an up-to-date document, termed a verification dossier, that documents the equipment's suitability for the hazardous area and environmental conditions expected, and is available for inspection and maintenance purposes. BWMS manufacturers must provide vessel representatives with all the necessary BWMS hazardous area component information to be included in a verification dossier. To streamline both the Type Approval process and to provide vessel representatives with necessary information, it is *recommended that the register be included in the OMSM*.

USCG Type Approval Certificates are valid for a period of 5-years from the date set forth on the type approval certificate, per 46 CFR 2.75-1. When renewal is required, it is within the USCG's discretion to:

- 1) Amend a type approval certificate based on new information which was not available at the time the original type approval certificate was issued; or
- 2) Require the manufacturer to specify the hazardous area classification and submit additional documentation demonstrating the equipment meets the requirements of 46 CFR 111.105 or its foreign equivalent.

BWMS type approval certificates approved for installation in hazardous locations, issued under 46 CFR 162.060-10(g) on or after June 1, 2025, will note the zone, gas/dust group, and temperature-code, along with relevant installation limitations for the applicable BWMS.

The USCG reiterates that the design verification is the responsibility of the IL. The ILs are encouraged to contact the Marine Safety Center for questions regarding hazardous area classification in advance of type approval application submission to avoid delays.

Sincerely,

D. H. COST
Captain, U. S. Coast Guard
Commanding Officer

Encl: (1) Hazardous Area Classification Register Template

Copy: Commandant, Office of Operating and Environmental Standards (CG-OES)