

MARINE SAFETY MANAGEMENT SYSTEM

TIER I – POLICY

ACCEPTABLE STANDARDS AND EQUIVALENCIES FOR PORTABLE FIRE EXTINGUISHERS REQUIRED ON CANADIAN VESSELS

Effective Date	Date of Revision

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1 Policy Objective

- 1.1 This policy is to clarify the required standards that are accepted by Transport Canada for portable fire extinguishers (PFE) equipped on all Canadian vessels, and provide a table of equivalency for PFE required for compliance with Part 1 of the [Vessel Fire Safety Regulations](#) (VFSR).

2 Policy Statement

- 2.1 Transport Canada accepts PFE that are certified by a product certification body in accordance with the National Fire Protection Association standard [NFPA 10 Portable Fire Extinguishers](#), the International Organization for Standardization standard [ISO 7165: Fire Fighting – Portable fire extinguishers – Performance and construction](#), or the European Committee for Standardization (CEN) standards [EN 3-7 Portable fire extinguishers Characteristics - Part 7: performance requirements and test methods](#) and [EN 3-10 Portable fire extinguishers – Part 10: Provisions for evaluating the conformity of a portable fire extinguisher to EN 3-7](#) as meeting the requirements of the International Code for Fire Safety Systems (FSS Code) and resolution A.951(23). United States Coast Guard approved PFE must bear a label displaying “Marine Type”.
- 2.2 PFE carried on vessels for compliance with Part 1 of the VFSR must meet the requirements of the FSS Code Chapter 4 and be type approved by a Recognized Organization in accordance with [TP 14612 – Procedures for Approval of Life-saving Appliances and Fire Safety Systems, Equipment and Products](#).
- 2.3 PFE meeting the requirements of Part 1 of the VFSR, and their equivalents as provided in Appendix 1, may be used aboard vessels subject to Part 1 of the VFSR to satisfy the PFE carriage requirements of that part, as well as on grandfathered vessels when PFE’s that comply with requirements of the Fire Detection and Extinguishing Equipment Regulations (FDEER) are replaced.
- 2.4 For vessels less than 24 metres in length, PFE must comply with Part 3 of the VFSR, section 12 of the [Small Vessel Regulations](#) (SVR), section 3.18 of the [Fishing Vessel Safety Regulations](#) (FVSR), or subsection 25(8) of the [Large Fishing Vessel Inspection Regulations](#) (LFVIR), a PFE that meets the approval requirements of the VFSR that is of the classification and capacity of PFE, is required by one of the provisions above, or an equivalent may be used.

3 Scope

- 3.1 This policy applies to PFE installed on all Canadian vessels.

- 3.2 This policy integrates the Table of Equivalency for Portable Fire Extinguishers for Part 1 and 3 of the VFSR in Appendix 1.

4 Authority

- 4.1 This policy falls under the overall administrative authority of the Director General, Marine Safety & Security (AMS) and the Marine Security and Security Executive Committee has approved this policy for general application.

5 Responsibility/further information

- 5.1 The Executive Director, Domestic Vessel Regulatory Oversight (AMSD), is responsible for the development, implementation, and maintenance of this policy.
- 5.2 Comments or queries related to this policy and its application should be addressed to :
- Manager, Arctic and Large Vessel, Design and Equipment Standards (AMSDL)
330 Sparks Street
Ottawa, ON, K1A 0N8
Fax : 613-991-4818
Email : TC.MarineTA-ATMaritime.TC@tc.gc.ca

6 Background

- 6.1 Prior to the coming into force of the VFSR in February 2017, requirements for the approval of PFE were found in Schedule IV of the *Fire Detection and Extinguishing Equipment Regulations* (FDEER). PFE approved by the Underwriters Laboratory Canada (ULC), or the U.S. Coast Guard were acceptable.
- 6.2 Vessels to which the VFSR Part 1 applies must be equipped with fire safety equipment approved to the requirements of the FSS Code as stated in the International Convention for the Safety of Life at Sea (SOLAS) Chapter II-2 regulations 10.3.1 and the Canadian modifications in sections 136 to 138 of the VFSR. The FSS Code in section 3.1.1.2 assigns to the Administration (The Minister) the determination of equivalents for fire extinguishers.
- 6.2.1 PFE for use on vessels for compliance with Part 3 of the VFSR, as outlined in 6.2 above, are accepted by Transport Canada as satisfying these determinations that are left to satisfaction of The Minister.
- 6.2.2 The FSS code, Paragraph 2 of Chapter 4 states that all fire extinguishers shall be of approved types and designs based on the *Improved guidelines for marine portable fire extinguishers* (resolution A.951(23)).
- 6.2.3 Section 6 of Resolution A.951(23) states in turn that the construction, performance and fire-extinguishing test specifications should be to the satisfaction of the Administration (The Minister), having due regard to an established international standard. The standards listed in 2.1 are those accepted by Transport Canada in satisfaction of these requirements.
- 6.3 The Table of Equivalencies for Portable Fire Extinguishers provided in Appendix 1 gives PFE accepted by Transport Canada as equivalent to 9L water or foam fire extinguishers with a 2A fire rating and larger capacity foam extinguishers required by SOLAS.

- 6.4 Portable Fire Extinguishers used on board vessels in accordance with the *Vessel Fire Safety Regulations* and the *Fire Detection and Extinguishing Equipment Regulations* are eligible to the Cylinder Exemption as described in [Subsection 1.49 of the *Transportation of Dangerous Goods Regulations* SOR/2001-286](#) when the exemptions conditions are met.

7 Definition

- 7.1 **Product Certification Body** (PCB) means a body that is accredited by the Standards Council of Canada, or by any other national accreditation organization that is a member of the International Accreditation Forum Multilateral Recognition Arrangement (MLA), to give third-party written assurance that a product meets the specified requirements for the product, including initial certification and maintenance of that certification.

8 Date of Application

- 8.1 This policy comes into effect on October 21, 2025.

9 Date for Review or Expiry

- 9.1 This policy will be reviewed not later than 5 years from the date of initial issue and every 5 years thereafter or until the VFSR is amended with the reflective changes.

10 Keywords

- Portable Fire Extinguisher (PFE)
- Approval
- Certification
- FSS Code
- Vessel Fire Safety Regulations (VFSR)
- European Committee for Standardization (CEN)

Appendix 1

Table 1

Table of Equivalents for Fire Extinguishers of the VFSR *Fire ratings based on ULC standard						
Regulatory Provision	Required extinguisher	Dry Chemical			Carbon Dioxide ¹	Wet Chemical Type K (Potassium Acetate and similar formulations) ²
		Multipurpose Dry chemical (ammonium phosphate)	Regular Dry Chemical ¹ (sodium bicarbonate)	Purple K ¹ (Potassium Bicarbonate)		
VFSR s.136(1), (2) & (3)(a) (SOLAS 10.3.2.1)	water ³ 9 L (2.3 gal) 2A fire rating	minimum 4.5 kg (9.9 lbs) capacity, and/or minimum 2A:20B:C fire rating ³	minimum 4.5 kg (9.9 lbs) capacity, and/or minimum 2A:20B:C fire rating ³	minimum 4.5 kg (9.9 lbs) capacity, and/or minimum 2A:20B:C fire rating ³	minimum 9 kg (19.8 lbs.) capacity and/or minimum 2A:20B:C fire rating	N/A ⁴
VFSR s.136(3)(b)	dry chemical ³ 4.5 kg (9.9 lbs)	N/A ⁴	minimum 4.5 kg (9.9 lbs.) capacity, and/or minimum 20B:C fire rating ³	N/A ⁴	N/A ⁴	minimum 9.4L (2.5 gal) capacity and/or minimum 2A:K fire rating
VFSR s.309 (1) s.309 (2) Item 1	dry chemical 2.25 kg (5 lbs) 2A:10B:C fire rating	N/A ⁴	minimum 4.5 kg (9.9 lbs) capacity, and/or minimum 2A:10B:C fire rating	minimum 2.5 kg (5 lbs.) capacity, and/or minimum 2A:10B:C fire rating	N/A ⁴	minimum 6 l (1.5 gal) capacity and/or minimum 2A:K fire rating
VFSR s.309(1) s.309(2) Item 1	dry chemical 4.25 kg (10 lbs) 2A:20B:C fire rating	N/A ⁴	minimum 4.5 kg (9.9 lbs) capacity, and/or minimum 2A:20B:C fire rating	minimum 4.5 kg (9.9 lbs.) capacity, and/or minimum 2A:20B:C fire rating	N/A ⁴	minimum 9.9 l (2.5 gal) capacity and/or minimum 2A:K fire rating
SOLAS 10.5.1.2.2, 10.5.2.2.2, 10.5.3.2.2	foam ³ 9 L (2.3 gal)	minimum 4.5 kg (9.9 lbs) capacity, and/or minimum 2A:20B:C fire rating ³	minimum 4.5 kg (9.9 lbs) capacity, and/or minimum 2A:20B:C fire rating ³	minimum 4.5 kg (9.9 lbs) capacity, and/or minimum 2A:20B:C fire rating ³	N/A ⁴	N/A ⁴
SOLAS 10.5.2.2.2, 10.5.3.2.1,	foam 45 L (11 gal)	minimum (9) kg (20 lbs) capacity, and/or minimum 233:B fire rating	minimum (9) kg (20 lbs) capacity, and/or minimum 233:B fire rating	minimum (9) kg (20 lbs) capacity, and/or minimum 233:B fire rating	N/A ⁴	N/A ⁴
SOLAS 10.5.1.2.2	foam 135 L (35 gal)	minimum 56 kg (125lbs) capacity, and/or minimum 317:B fire rating	minimum 57 kg (125lbs) capacity, and/or minimum 317:B fire rating	minimum 57 kg (125lbs) capacity, and/or minimum 317:B fire rating	N/A ⁴	N/A ⁴

Notes:

1. Use for Class B and C fires only. May not be located in accommodation spaces.
 2. Use for galley application only.
 3. FSS Code, Chapter 4.3.1.1.1: “*each powder or carbon dioxide extinguisher shall have a capacity of at least 5 kg and each foam extinguisher shall have a capacity of at least 9 l*”.
 4. N/A: Not Applicable as medium is not compatible for application or is identical to existing requirements.
- * Matrix uses ULC Fire Ratings.

Appendix 2

The following requirements of the Transportation of Dangerous Goods Regulations (TDGR) applicable to fire extinguishers are provided in this Appendix for informational purposes. For complete requirements please consult the TDGR directly.

1. A PFE installed aboard a Canadian vessel for compliance with the VFSR, SVR, FVSR or LFVIR for the safety of the vessel is exempt from the requirements of the TDGR as per section 1.27 of those regulations.
2. When in transit to or from a vessel, pressure containers of PFE containing compressed or liquified gas are subject to section 5.10 of the TDGR except as exempted per section 1.47.

“1.47 Subsections 5.10(1) and (2) of Part 5 (Means of Containment) do not apply to the handling, offering for transport or transportation of UN1044, FIRE EXTINGUISHERS, if the fire extinguishers

- (a) do not contain dangerous goods included in Class 2.3, Class 6.1 or Class 8;
- (b) are contained in an outer means of containment;
- (c) have a capacity less than 18 L or, if they contain liquefied gas, a capacity less than 0.6 L;
- (d) have an internal pressure less than or equal to 1 650 kPa at 21°C; and
- (e) are manufactures, tested, maintained, marked and used in accordance with ULC Standard S504, ULD Standard S507, ULD Standard S512 or ULD Standard S554.”