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# CANADIAN SUPPLEMENT TO THE SOLAS CONVENTION

2<sup>nd</sup> EDITION  
DECEMBER 2017



Canada

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| <b>Originator</b>           | Domestic Vessel Regulatory Oversight & Boating Safety (AMSD)<br>Tower C, Place de Ville<br>330 Sparks Street, 11th Floor<br>Ottawa, Ontario K1A 0N8 | <b>Telephone</b> | 1-855-859-3123 (Toll Free) or 613-991-3135                                       |
|                             |   | <b>Fax</b>       | 613-991-4818   |
|                             |   | <b>E-mail</b>    | <a href="mailto:insp.stand-norm.insp@tc.gc.ca">insp.stand-norm.insp@tc.gc.ca</a> |
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# **PART I: INTRODUCTION**

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## **1 THE CANADIAN SUPPLEMENT**

- 1.1.1.1 The first edition of the *Canadian Supplement to the SOLAS Convention* is published in support of the regulatory regime documented in Appendix 1 to the policy Acceptance of an Alternative Regulatory Regime for Inspection, Construction and Safety Equipment. Vessels applying the regulatory regime documented in the above-mentioned policy must comply with the provisions in this supplement.
- 1.1.1.2 The *Canadian Supplement to the SOLAS Convention* outlines a set of mandatory Canadian-specific requirements related to SOLAS and associated Codes, Recommendations, Guidelines and Interpretations published in IMO Circulars and Resolutions referenced in this document and the policy. For example, Offshore Supply Vessels are to comply with the OSV Code. As described in the policy, any Regulations, Codes, Recommendations, Guidelines, etc., which are not specifically excluded must be applied to the vessel in question.
- 1.1.1.3 This document is intended for use by Recognized Organizations, Authorized Representatives, vessel owners and operators, shipyards, and designers. This document is on the construction, equipment and inspection requirements of SOLAS. Accordingly, this Supplement may not be complete and does not cover all regulations; however, additional requirements are incorporated by reference where applicable. This document may change based on ongoing regulatory review work.
- 1.1.1.4 The Annex provided in this document provides information about regulations that are not replaced by the Supplement, but which affect construction and should be brought to the attention of the above-mentioned persons.**

## **2 APPLICATION**

- 2.1.1.1 This *Canadian Supplement to the SOLAS Convention* applies to new passenger vessels of more than 24 metres and cargo vessels of more than 500 gross tonnage and to existing passenger vessels of more than 24 metres and cargo vessels of more than 500 gross tonnage transferring to the Canadian Registry.

2.1.1.2 Requests to apply these instruments to smaller vessels will be considered on a case-by-case basis.<sup>1</sup>

### **3 DEFINITIONS**

3.1.1.1 The following definitions are applicable to this Supplement:

- a) “**Act**” means the *Canada Shipping Act, 2001*.
- b) “**Cargo vessel**” means a vessel that is not a passenger vessel.
- c) “**IMO**” means the International Maritime Organization.
- d) “**Length**” has the same meaning as in section 6 of the *Vessel Registration and Tonnage Regulations*.
- e) “**Load Lines Convention**” means the International Convention on Load Lines, 1966, as modified by the Protocol of 1988.
- f) “**Minister**” means the Minister of Transport.
- g) “**Near coastal voyage, Class 1**” has the same meaning as in section 1 of the *Vessel Certificates Regulations*.
- h) “**Near coastal voyage, Class 2**” has the same meaning as in section 1 of the *Vessel Certificates Regulations*.
- i) “**Near coastal voyage, Class 2, limited**” means a voyage:
  - i. that is not a sheltered waters voyage,
  - ii. during which the vessel engaged on the voyage is always within 5 nautical miles from shore in waters contiguous to Canada, the United States (except Hawaii) or Saint Pierre and Miquelon,
  - iii. during which the maximum distance from the port of call is not more than 7.5 nautical miles, if the voyage starts and ends at the same port of call, and
  - iv. during which the maximum distance between all ports of call is not more than 15 nautical miles, if the voyage starts and ends at different ports of call.
- j) “**Passenger vessel**” means a vessel that carries more than 12 passengers.
- k) “**Sheltered waters voyage**” has the same meaning as in section 1 of the *Vessel Certificates Regulations*.

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<sup>1</sup> “Scope” from Tier I Policy: Acceptance of an Alternative Regulatory Regime for Inspection, Construction and Safety Equipment.

- l) “**SOLAS**” means the International Convention for the Safety of Life at Sea, 1974, and the Protocol of 1988 relating to the Convention. (SOLAS).
- m) “**Unlimited voyage**” has the same meaning as in section 1 of the *Vessel Certificates Regulations*.

## **4 INTERPRETATIONS**

- 4.1.1.1 A vessel is constructed on:
  - a) The earliest of:
    - i. the day on which its keel is laid,
    - ii. the day on which construction identifiable with a specific vessel begins, and
    - iii. the day on which assembly of the vessel reaches the lesser of 50 tonnes and one per cent of the estimated mass of all structural material; or
  - b) In the case of a vessel converted to a passenger vessel, the day on which the conversion begins.
- 4.1.1.2 Unless stated otherwise, any reference to a document is a reference to the document as amended from time to time.
- 4.1.1.3 For the purpose of interpreting IMO documents:
  - a) “Should” is to be read as “must”, and
  - b) “Administration” is to be read as “Minister”.
- 4.1.1.4 Footnotes in documents that are included or referenced by this *Canadian Supplement to the SOLAS Convention* are to be considered mandatory. Where a footnote in a referenced document includes a reference to another document, this reference is also mandatory, including guidelines, recommendations, requirements and similar matters.

## **PART II: SOLAS CHAPTER I**

### **General Provisions**

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#### **1 PART A – APPLICATION, DEFINITIONS, ETC.**

##### **1.1 Regulation 1 - *Application***

- 1.1.1.1 Except where specific allowances are provided in this Supplement, or through application to the Marine Technical Review Board, the provisions of the SOLAS Convention apply to all vessels using this Supplement.

##### **1.2 Regulation 3 - *Exceptions***

- 1.2.1.1 Except where specific allowances are provided in this Supplement, or through application to the Marine Technical Review Board, the provisions of the SOLAS Convention apply to vessels less than 500 gross tonnage using this Supplement.

#### **2 PART B – SURVEYS AND CERTIFICATES**

- 2.1.1.1 The inspection and certification provisions of Part B are applicable to all vessels using this Supplement, regardless of size, except vessels on exclusively domestic voyages may be issued domestic certificates rather than the certificates identified in Regulation 12.

# **PART III: SOLAS CHAPTER II-1**

## **Construction – Structure, subdivision and stability, machinery and electrical installations**

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### **1 GENERAL**

#### **1.1 Reference to Other IMO Instruments or SOLAS Chapters**

##### **1.1.1 Load Lines Convention**

For the purpose of the *Canadian Supplement to the SOLAS Convention*, references to the International Convention on Load Lines made in SOLAS Chapter II-1 shall be interpreted as a reference to the appropriate part of the *Load Line Regulations*, SOR/2007-99.

### **2 REGULATIONS**

#### **2.1 Regulation 3-8 *Towing and mooring equipment***

##### **2.1.1 Anchoring Equipment**

2.1.1.1 All vessels shall carry a complete set of anchors and chains as per the rules of a Recognized Organization.

#### **2.2 Regulations 6 to 8**

##### **2.2.1 Passenger Vessels**

2.2.1.1 Non-Safety Convention passenger vessels may comply with the requirements set out in *TP 10943: Passenger Vessel Operations and Damaged Stability Standards (Non-convention vessels) (2007)* instead of complying with regulations 6, 7 and 8.

##### **2.2.2 Cargo Vessels**

2.2.2.1 Regulations 6, 7 and 8 do not apply to cargo vessels navigating solely in the Great Lakes of North America and the St. Lawrence River as far east as a straight line drawn from Cap des Rosiers to West Point, Anticosti Island and, on the north side of Anticosti Island, the 63rd meridian.

## **2.3 Regulation 8-1 *System capabilities after a flooding casualty on passenger vessels***

### **2.3.1 Application**

2.3.1.1 Regulation 8-1 does not apply to vessels engaged on a domestic voyage that does not exceed Near Coastal 2 voyage.

## **2.4 Regulation 18 *Assigning, marking and recording of subdivision load lines for passenger ships***

### **2.4.1 Interpretation**

2.4.1.1 The St. Lawrence River west of the eastern end of the Ile d'Orléans is deemed to be fresh water.

2.4.1.2 The domestic inspection certificate (form 85-0431) on non-convention vessels shall be accepted as the Inspection Certificate.

2.4.1.3 Vessels engaged exclusively on fresh-water voyages OR vessels holding a Great Lakes and Inland Waters of Canada Load Line Certificate:

a) References to "salt water" in Regulation 18. 5 and 18.7 shall be read as "fresh water".

2.4.1.4 The Authorized Representative of a vessel that is not required to hold a Load Lines Certificate under the *Load Line Regulations*, SOR/2007-99 shall ensure:

a) The AR of the vessel has a letter stating the subdivision draught at which the ship is permitted to operate, and

b) The letter is posted in the wheel house, under glass, adjacent to the Inspection Certificate.

2.4.1.5 Vessels that are not required to comply with *Load Line Regulations*, SOR/2007-99 shall comply with the conditions of assignment set out in the Schedule 1 of the Regulations or with Conditions of Assignment set out in Chapter II of Annex I to the Load Lines Convention.

## **2.5 Regulations 19 to 25 Part B-4 *Stability management***

### **2.5.1 Recording of information**

2.5.1.1 For vessels that are not required to keep an official log book in compliance with section 339 of the *Marine Personnel Regulations*,

SOR/2007-115, the master shall record the information required under regulations 21 to 24 as per the requirements of an official log book approved by the Minister.

## **2.6 Regulations 26 to 39 Part C Machinery installations**

### **2.6.1 Operation in slush ice conditions**

2.6.1.1 Vessels engaged on a voyage within Eastern Canadian waters and operating in slush ice conditions that are not built to Classification Society Rules for navigation in ice shall ensure the sea inlets are designed and constructed to prevent slush and/or spray ice from blocking the seawater cooling intakes and related air vents.

2.6.1.2 For Guidance, see MSC/Circ.504 *Guidance on design and construction of sea inlets under slush ice conditions*, or other appropriate guidelines providing an equivalent safety level.

## **2.7 Regulation 40 General**

### **2.7.1 Approvals**

2.7.1.1 Except as provided in 2.7.1.2, electrical equipment which includes, appliances, accessories and fittings shall be approved by a Canadian Recognized Organization or a Product Certification Body as meeting the rule, code or standard under which it is designed; and shall bear the identification mark of the testing laboratory or product certification body that verifies that the equipment meets the rule, code or standard. The Recognized Organization type approval certificate or the Product Certification Body certification listing must be presented to TC or the Recognized Organization on request.

2.7.1.2 Electrical equipment bearing the CE Marking indicating that it meets the applicable requirements that are set out in *Directive 2014/35/EU of the European Parliament and of the Council* supported by the *Guidelines on the application of the Directive* (refer to the following link [https://ec.europa.eu/growth/sectors/electrical-engineering/lvd-directive\\_en](https://ec.europa.eu/growth/sectors/electrical-engineering/lvd-directive_en)) is acceptable. The EU Declaration of Conformity for the equipment, in English or French, must be presented to TC or the Recognized Organization on request.

2.7.1.3 Where special marine type equipment is required and there is no standard for it, it shall be of a type that is acceptable to the Recognized Organization.

2.7.1.4 A “product certification body” 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, to give third-party written assurance that a product meets the specified requirements for the product, including granting of initial certification and maintenance of the certification.

## 2.7.2 Institute of Electrical and Electronic Engineers

2.7.2.1 For the purpose of the following footnote to regulation 40.2:

“Refer to the recommendations published by the International Electro technical commission and, in particular, publication IEC 60092 – *Electrical installations in ships.*”

2.7.2.2 This footnote may be interpreted to also include the;

- a) Institute of Electrical and Electronic Engineers standard 45 titled Recommended Practice for Electrical Installations on Shipboard with respect to a vessel engaged on a domestic voyage; or
- b) The electrical rules of a Canadian Recognized Organization.

## 2.7.3 Heater requirements

2.7.3.1 Heaters in ventilating trunks and re-heat units:

- (a) must be an enclosed type. The heater or re-heat unit enclosure must be protected against corrosion.
- (b) Each heater or re-heat unit must have a thermal cutout of the manually-reset type that prevents overheating of the element and must have a thermal regulating switch.
- (c) The external temperature of the enclosure must not exceed:
  - (i) 100°C in case of heaters or re-heat unit that are surface or recess mounted in bulkheads, decks or ceiling, or that are installed behind bulkhead lining or ceiling, or
  - (ii) 125°C in case of heaters or re-heat unit that are not recess mounted, surface mounted or installed behind bulkhead lining or ceiling.
- (d) If a heater or a re-heat unit is mounted on or next to a deck or bulkhead, the heater must not cause the temperature of the nearest deck or bulkhead to be over 55 degrees C.
- (e) Heating elements must be interlocked with the fan motor supplying air to the unit so that it can only be energized when the fan is running.

(f) For test purposes, an ambient temperature of 25 degrees C must be used.

#### **2.7.4 Electrical Receptacles in washrooms**

2.7.4.1 Electrical receptacles installed within 1.5 m of sinks (bathrooms, washrooms or wash basins complete with drainpipe), bathtubs or shower stalls shall be protected by an isolating transformer or a ground fault circuit interrupter of the Class A type (on a grounded distribution systems only) except where the receptacle is:

- a) intended for a stationary appliance designated for the location; and
- b) located behind the stationary appliance such that it is inaccessible for use with general-purpose portable appliances.

### **2.8 Regulation 42 *Emergency source of electrical power in passenger ships***

#### **2.8.1 Application**

2.8.1.1 Vessels may comply with the requirements stated in *TP 127: Ships Electrical Standards (2008)* with respect to vessels engaged on a domestic voyage instead of complying with regulation 42.

### **2.9 Regulation 43 *Emergency source of electrical power in cargo ships***

#### **2.9.1 Application**

2.9.1.1 Vessels may comply with the requirements stated in *TP 127: Ships Electrical Standards (2008)* with respect to vessels engaged on a domestic voyage instead of complying with regulation 43.

## **PART IV: SOLAS CHAPTER III**

### **Life-Saving Appliances and Arrangements**

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#### **1 GENERAL**

##### **1.1 Reserved**

#### **2 LSA CODE RESOLUTION MSC.48(66) AND RESOLUTION MSC.81(70)**

##### **2.1 General**

###### **2.1.1 Approval of Life Saving Appliances**

2.1.1.1 In addition to the requirements of Resolution MSC.48(66) and Resolution MSC.71(7) all appliances shall comply with the Canadian Modifications set out in *TP 14475: Canadian Life Saving Appliance Standard*.

2.1.1.2 In addition to the requirements of Resolution MSC.48(66) and Resolution MSC.71(7) all appliances shall be approved in accordance with *TP 14612: Procedures for Approval of Life-Saving Appliances and Fire Safety Systems, Equipment and Products*.

#### **3 REGULATIONS**

##### **3.1 Regulation 7 - *Personal life-saving appliances***

###### **3.1.1 Regulation 7.3 - *Immersion suits and anti-exposure suits***

3.1.1.1 Immersion suits must be provided regardless of whether a vessel is constantly engaged on voyages in warm climates.

3.1.1.2 Immersion suits shall be approved as meeting the requirements of the Canadian General Standards Board Standard *CAN/CGSB-65.16-2005 Marine Abandonment Immersion Suit Systems*, as amended; or,

- 3.1.1.3 Immersion suits must meet section 2.3.2.2 of the LSA Code, which specifies a suit “made of material with inherent insulation.” In addition, the suit must provide inherent buoyancy.

## **3.2 Regulation 8 - *Muster list and emergency instructions***

### **3.2.1 General**

- 3.2.1.1 Regulation 8 does not apply in respect of vessels to which the *Fire and Boat Drills Regulations* apply.<sup>2</sup>

## **3.3 Regulation 19 - *Emergency training and drills***

### **3.3.1 General**

- 3.3.1.1 Regulation 19.2, 19.3 and 19.5 do not apply in respect of vessels to which the *Fire and Boat Drills Regulations* apply.

## **3.4 Regulation 27 - *Information on passengers***

### **3.4.1 General**

- 3.4.1.1 Regulation 27 does not apply in respect of vessels to which the *Fire and Boat Drills Regulations* apply.

## **3.5 Regulation 32 - *Personal life-saving appliances***

### **3.5.1 Regulation 32.3.2 - Immersion suits**

- 3.5.1.1 Immersion suits must be provided regardless of whether a vessel is constantly engaged on voyages in warm climates.

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<sup>2</sup> Application of the *Fire and Boat Drills Regulations* is as follows:

2. (1) These Regulations apply in respect of self-propelled Canadian vessels that
- (a) are Safety Convention vessels; or
  - (b) are required to hold an inspection certificate under section 10 of the [Vessel Certificates Regulations](#).
- (2) These Regulations do not apply in respect of
- (a) fishing vessels of 150 gross tonnage or less;
  - (b) cable ferries; and
  - (c) vessels of 15 gross tonnage or less that carry 12 or fewer passengers.

# **PART V: SOLAS CHAPTER XII**

## **Additional safety measures for bulk carriers**

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### **1 GENERAL**

#### **1.1 Reserved**

# **ANNEX 1: Other Regulations that include Construction or Equipment Requirements**

## **1 GENERAL**

- 1.1** The Canadian Supplement supersedes only those regulations identified in the Policy Acceptance of an Alternative Regulatory Regime for Inspection, Construction and Safety Equipment, approved by the Marine Safety and Security Executive on October 29, 2012. This annex includes information to highlight differences between SOLAS and ILO conventions related to construction or equipment.

**IMPORTANT NOTE:**

The annex 1 of the Canadian Supplement to the SOLAS Convention also includes reference to construction requirements in regulations that are not included in 1.1 of Annex 1 of the Policy of Acceptance of an Alternative Regulatory Regime. They are provided for the information of those using the Supplement. The regulations stating these requirements are not replaced by the current Policy and remain applicable.

## **2 SOLAS CHAPTER IV: RADIOCOMMUNICATIONS**

### **2.1 General**

- 2.1.1** The specific changes to SOLAS Chapter IV are given in the following paragraphs.

#### **2.1.2 Regulation 1 - *Application***

- 2.1.2.1** Despite regulation 1.2, Chapter IV applies to vessels navigating in the Great Lakes of North America.

#### **2.1.3 Regulation 14 - *Performance Standards***

- 2.1.3.1 Radio equipment onboard a ship shall be of a type approved by a “competent authority” to the applicable IEC or ETSI standard for that equipment.

## **2.2 Additional Regulations**

### **2.2.1 General**

- 2.2.1.1 The following regulations may also impact construction and design. The list below includes the relevant sections of Canadian regulations, and the associated SOLAS regulation (in parentheses).

#### **2.2.2 *Ship Station (Radio) Regulations, 1999 (SOR/2000-260)***

- a) Section 2 (Regulation 2 Terms and Definitions)
- b) Section 8, 16, 18 (Regulation 7 Radio Equipment: General)
- c) Section 7 (Regulation 9 Radio Equipment Sea Areas A1 and A2)
- d) Section 15 (Regulation 11 Radio Equipment Sea Areas A1, A2, A3 and A4)
- e) Section 19, 20 (Regulation 15 Maintenance Requirements)

#### **2.2.3 *Ship Station (Radio) Technical Regulations, 1999 (SOR/2000-265)***

- a) Section 4, 26 (Regulation 15 Maintenance Requirements)
- b) Section 13 (Regulation 13 Sources of Energy)
- c) Section 41 (Regulation 17 Radio Records)

## **3 SOLAS CHAPTER V: SAFETY OF NAVIGATION**

### **3.1.1 *Navigation Safety Regulations***

- 3.1.1.1 The *Navigation Safety Regulations (SOR/2005-134)* contain requirements related to Chapter V of SOLAS. The specific changes can be found in the following sections of the regulations:
- a) Section 2 (Regulation 1 Application)
  - b) Section 1 (Regulation 2 Definitions)

- c) Section 11 (Regulation 18 Approval, surveys and performance standards of navigational systems and equipment and voyage data recorder)
- d) Section 66, 64, 67, 68, 69, 70, 71, 75, 76 (Regulation 19 Carriage requirements for ship borne navigational systems and equipment)
- e) Section 74 (Regulation 23 Pilot transfer arrangements)

### **3.1.2 *Voyage Data Recorder Regulations***

- 3.1.2.1 The *Voyage Data Recorder Regulations (SOR/2001-203)* contain requirements related to Regulation 20 - Voyage data recorders.

## **4 COLREG CONVENTION**

### **4.1 General**

#### **4.1.1 Collision Regulations**

4.1.1.1 The [\*Collision Regulations \(C.R.C., 1416\)\*](#) contain the Canadian additions to the COLREG Convention (*Convention on the International Regulations for Preventing Collisions at Sea*). Canadian additions related to construction and equipment are with respect to the following sections of the COLREG Convention. The Collision Regulations specifically identify additions to the Convention, and the following sections of the regulations include additional construction and/or equipment requirements:

- a) Section 5 - Proof of Compliance - Lights, Shapes, Sound-Signaling Appliances and Radar Reflectors
- b) SCHEDULE 1 – International Regulations for Preventing Collisions at Sea, 1972, with Canadian Modifications
- c) PART A - General
  - i. RULE 1 Application
- d) PART C - LIGHTS AND SHAPES
  - i. RULE 21: Definitions
  - ii. RULE 22: Visibility of Lights
  - iii. RULE 24: Towing and Pushing - Composite Unit
- e) Part F - ADDITIONAL CANADIAN PROVISIONS
  - i. RULE 42: Additional Requirements for Exploration or Exploitation Vessels
  - ii. RULE 45: Blue Flashing Light
  - iii. RULE 46: Alternate System of Navigation Lights
- f) ANNEX I: POSITIONING AND TECHNICAL DETAILS OF LIGHTS AND SHAPES
- g) ANNEX III: TECHNICAL DETAILS OF SOUND SIGNAL APPLIANCES

## 5 MARPOL

### 5.1 *Vessel Pollution and Dangerous Chemicals Regulations*

5.1.1.1 The *Vessel Pollution and Dangerous Chemicals Regulations (SOR/2012-69)* put the MARPOL Convention into force. These regulations contain a significant number of operational requirements. The construction and equipment requirements over and above the Convention are as follows:

### 5.2 **Annex 1 - Regulations for the prevention of pollution by oil**

5.2.1.1 In addition to the controls on discharges of oil set out in Annex I to MARPOL, Canadian regulations require Canadian vessels operating in the Canadian waters of the Great Lakes and the St. Lawrence River west of Anticosti Island to be equipped with 5 parts per million oily bilge alarms. These alarms shall comply with *TP 12301: Standard for 5 ppm Bilge Alarms for Canadian Inland Waters*.

### 5.3 **Annex IV - Regulations for the prevention of pollution by sewage from ships**

5.3.1.1 Untreated sewage may not be discharged within inland waters. Canadian vessels shall be:

- a) Fitted with a marine sanitation device that meets standards in MARPOL Annex IV: Regulations for the Prevention of Pollution by Sewage from Ships, and
- b) In addition, where a Canadian vessel is operating frequently in a designated sewage area, the vessel shall be fitted with either:
  - i. A marine sanitation device that produces an effluent with a fecal coliform count that is equal to or less than 14/100 ml, or
  - ii. A holding tank that meets Canadian standards as defined in section 88 of the *Vessel Pollution and Dangerous Chemicals Regulations*, included here for reference:

*Vessel Pollution and Dangerous Chemicals Regulations (SOR/2012-69)*

**88.** For the purposes of subsection 86(1), a holding tank must:

- (a) be constructed so that it does not compromise the integrity of the hull;
- (b) be constructed of structurally sound material that prevents the tank contents from leaking;
- (c) be constructed so that the potable water system and other systems cannot become contaminated;
- (d) be resistant to corrosion by sewage;
- (e) have an adequate volume for the amount of sewage that could be reasonably expected to be produced on a voyage in waters where the discharge of sewage is not authorized by section 96;
- (f) be provided with a discharge connection and piping system for the removal of the tank contents at a reception facility;
- (g) be designed so that the level of sewage in the tank can be determined without the tank being opened and without contacting or removing any of the tank contents, or be equipped with a device that allows the determination to be made;
- (h) in the case of a vessel, other than a pleasure craft, that operates solely on the Great Lakes and their connecting waters, be equipped with an alarm that indicates when the tank is 75% full by volume; and
- (i) be equipped with a ventilation device that
  - (i) has its outlet located on the exterior of the vessel and in a safe location away from ignition sources and areas usually occupied by people,
  - (ii) prevents the build-up within the tank of pressure that could cause damage to the tank,
  - (iii) is designed to minimize clogging by the contents of the tank or by climatic conditions such as snow or ice,
  - (iv) is constructed of material that cannot be corroded by sewage, and
  - (v) has a flame screen of non-corrosive material fitted to the vent outlet.”

## **6 MARITIME OCCUPATIONAL HEALTH AND SAFETY**

### **6.1 General**

- 6.1.1.1 Responsibility for Occupational Health and Safety is divided among several jurisdictions. For vessels trading within a single province (e.g., a ferry), adherence to that province's occupational health and safety regulations are required.
- 6.1.1.2 For vessels under federal jurisdiction (including interprovincial ferries, cargo ships trading between provinces, etc.), the *Maritime Occupational Health and Safety Regulations (SOR/2010-120)* apply. These Regulations are created under the *Canada Labour Code (R.S.C., 1985, c. L-2)*, not the *Canada Shipping Act, 2001*. An exemption process (equivalent to the Marine Technical Review Board) does not exist for the MOHS Regulations. These Regulations contain construction requirements, particularly related to accommodations.

### **6.2 Maritime Labour Convention, 2006**

#### **6.2.1 General**

- 6.2.1.1 Vessels following the *Canadian Supplement to the SOLAS Convention* as part of their regulatory regime shall comply with the Maritime Labour Convention and its requirements, when it enters into force.
- 6.2.1.2 Vessels complying with the construction requirements of the MLC 2006 are considered to meet the construction requirements of the *Maritime Occupational Health and Safety Regulations (SOR/2010-120)* and the *Crew Accommodation Regulations (C.R.C., c. 1418)*, as long as the following additional requirements are met:

*Maritime Occupational Health and Safety Regulations (SOR/2010-120)*

**24. (3)** The deck covering in all crew accommodation must

- (a) be kept free of grease, oil or any other slippery substance and any material or object that may create a hazard to an employee; and
- (b) have sufficient drainage

*Maritime Occupational Health and Safety Regulations (SOR/2010-120)*

**36.** (3) The bedding set must, at a minimum, consist of the following items of appropriate size for the berth:

- (a) one pillow;
- (b) one pillow case;
- (c) two flat bedsheets; and
- (d) one blanket.

**6.2.2 Ventilation by mechanical means***Maritime Occupational Health and Safety Regulations (SOR/2010-120)*

**56.** (4) If an employer provides ventilation by mechanical means, the amount of air provided for a type of room set out in column 1 of the table to this subsection must be no less than that set out in column 2.

(5) If an employer provides for the ventilation of a galley or a canteen by mechanical means, the rate of change of air must be at least 9 l/s for each employee who is normally employed in the galley at any one time or for each employee who uses the canteen at any one time, as the case may be.

TABLE

## MINIMUM VENTILATION REQUIREMENTS FOR CHANGE ROOMS, SANITARY FACILITIES AND SHOWER ROOMS

| Item | Column 1<br>Type of Room   | Column 2<br>Ventilation Requirements in litres per second (l/s)                                 |
|------|--|---|
| 1.   | Change Room  |   |
|      | (a) for employees with clean work clothes                          | (a) 5 l/s per m <sup>2</sup> of floor area  |
|      | (b) for employees with wet or sweaty work clothes                  | (b) 10 l/s per m <sup>2</sup> of floor area; 3 l/s exhausted from each locker                   |
|      | (c) for employees who work where work clothes pick up heavy odours | (c) 15 l/s per m <sup>2</sup> of floor area; 4 l/s exhausted from each locker                   |
| 2.   | Sanitary Facility  | 10 l/s per m <sup>2</sup> of floor area; at least 10 l/s per toilet compartment; minimum 90 l/s |
| 3.   | Shower Room  | 10 l/s per m <sup>2</sup> of floor area; at least 20 l/s per shower head; minimum 90 l/s        |

**6.2.3 Noise level***Maritime Occupational Health and Safety Regulations (SOR/2010-120)*

**161.** (2) Subject to subsection (3), if it is not reasonably practicable for an employer to maintain the level of sound in the work place at less than 85 dB, an employee must not be exposed in any 24-hour period

(a) to a level of sound set out in column 1 of the table to this section for a number of hours that is more than the number set out in column 2; or

(b) to any combination of the different levels of sound set out in column 1 of the table to this section, if the number of hours of exposure to each level of sound divided by the maximum number of hours of exposure for that level per 24-hour period set out in column 2 of the table to this section is more than one.

(3) An employee must not be exposed to a continuous level of sound in crew accommodation that is more than 75 dB.

TABLE

MAXIMUM EXPOSURE TO LEVELS OF SOUND IN THE WORK PLACE

|      | Column 1                            | Column 2  |
|------|-------------------------------------|---|
| Item | Levels of Sound in dB               | Maximum Number of Hours of Exposure per Employee per 24-hour Period |
| 1.   | 85 or more but not more than 90     | 8   |
| 2.   | more than 90 but not more than 92   | 6   |
| 3.   | more than 92 but not more than 95   | 4   |
| 4.   | more than 95 but not more than 97   | 3   |
| 5.   | more than 97 but not more than 100  | 2   |
| 6.   | more than 100 but not more than 102 | 1.5   |
| 7.   | more than 102 but not more than 105 | 1   |
| 8.   | more than 105 but not more than 110 | 0.5   |
| 9.   | more than 110 but not more than 115 | 0.25  |
| 10.  | more than 115                       | 0   |

**6.2.4 Hazard Investigation***Maritime Occupational Health and Safety Regulations (SOR/2010-120)*

**162.** (1) If it is not reasonably practicable for an employer to maintain the exposure of an employee to a level of sound at or below the levels referred to in the section above, the employer must

- (a) appoint a qualified person to carry out an investigation of the degree of exposure;
- (b) notify the work place committee or the health and safety representative of the investigation and of the name of the person appointed to carry out the investigation; and
- (c) provide every employee entering the work place with a hearing protector that
  - (i) meets the standards set out in CSA Standard CAN/CSA-Z94.2-02 (R2007), *Hearing Protection Devices, Performance, Selection, Care and Use*, and
  - (ii) reduces the level of sound reaching the employee's ears to less than 85 dB.

(2) For the purposes of subsection (1), the measurement of the A-weighted sound pressure level in a work place must be performed instantaneously, in normal working conditions, using the slow response setting of a sound level meter.

(3) During the investigation referred to in subsection 1, the following matters must be considered:

- (a) the sources of sound in the work place;
- (b) the A-weighted sound pressure levels to which the employee is likely to be exposed and the duration of that exposure;
- (c) the methods being used to reduce the exposure;
- (d) whether the exposure of the employee is likely to be more than the limits prescribed by section 161; and
- (e) whether the employee is likely to be exposed to a noise exposure level equal to or greater than 85 dBA.

(4) On completion of the investigation and after consultation with the work place committee or the health and safety representative, as the case may be, the person appointed to carry out the investigation must set out in a written report signed and dated by the person

- (a) observations respecting the matters considered under subsection (3);
- (b) recommendations respecting the measures that are to be taken in order to comply with section 161; and
- (c) recommendations respecting the use of hearing protectors by employees who are exposed to a noise exposure level ( $L_{ex,8}$ ) equal to or greater than 85 dBA and not greater than 87 dBA.

(5) The report must be kept by the employer at the work place where it applies for a period of 10 years after the day on which the report is submitted.

- (6) If it is stated in the report that employees are likely to be exposed to a

noise exposure level ( $L_{ex,8}$ ) equal to or greater than 85 dBA, the employer must, without delay,

- (a) post and keep posted a copy of the report in a conspicuous place in the work place where it applies; and
- (b) provide the employees with written information describing the hazards associated with exposure to high levels of sound.

### **6.3 *ILO Convention 152 - Occupational Safety and Health (Dock Work) Convention, 1979***

#### **6.3.1 General**

- 6.3.1.1 Vessels following the *Canadian Supplement to the SOLAS Convention* as part of their regulatory regime shall comply with the requirements of the *Cargo, Fumigation and Tackle Regulations, Part 3, Division 1 – Cargo Gear (SOR/2007-128)*, applicable to lifting appliances that are part of the vessel's equipment.

## **7 REGULATIONS UNDER OTHER DEPARTMENTS**

#### **7.1.1 General**

- 7.1.1.1 Other Federal Departments also have regulations which have an impact on the design and construction of ships. The following regulations apply to Canadian vessels, but do not fall under the jurisdiction of Transport Canada.

#### **7.1.2 Potable Water Regulations for Common Carriers**

- 7.1.2.1 Under the jurisdiction of the Minister of Health, the *Potable Water Regulations for Common Carriers (C.R.C., c. 1105)* contain specific requirements for carriage of potable water on Canadian passenger vessels, including restrictions on the location of potable water tanks. These regulations are under the authority of Health Canada.

### **7.1.3 Non-smokers' Health Regulations**

- 7.1.3.1 Under the jurisdiction of the Minister of Labour, the *Non-smokers' Health Regulations (SOR/90-21)* contain specific requirements related to the designation of smoking areas.